

CORPORATION OF MADRAS



(RIPON BUILDINGS)

ANNUAL REPORT

OF THE

[Health Officer]

Health Department.

of the City of Madras

FOR THE YEAR

1921.



MADRAS :

PRINTED BY S. MURTHY & CO.,

AT THE "KAPALEE PRESS,"

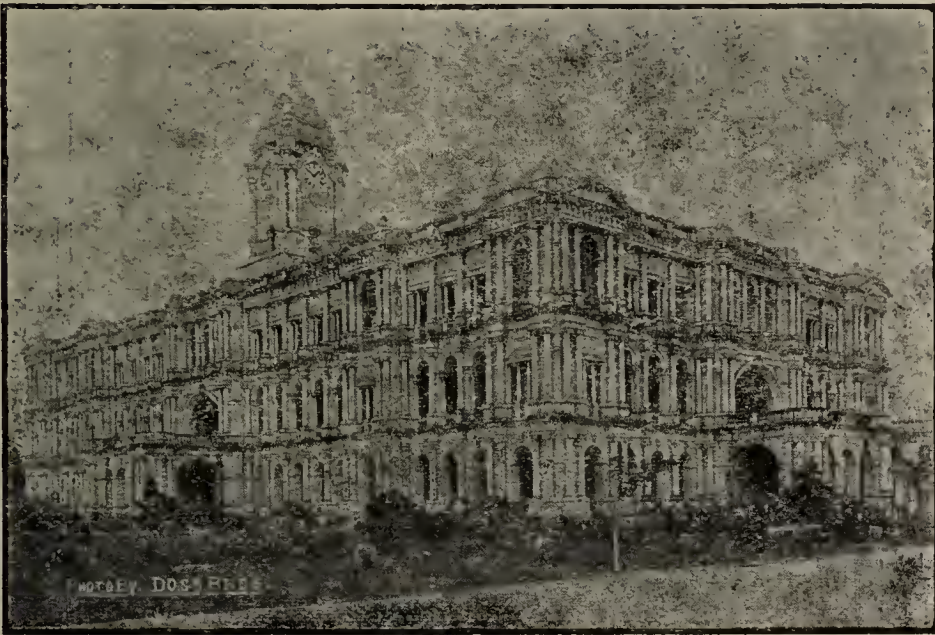
305, THAMBU CHETTY STREET.

1922.



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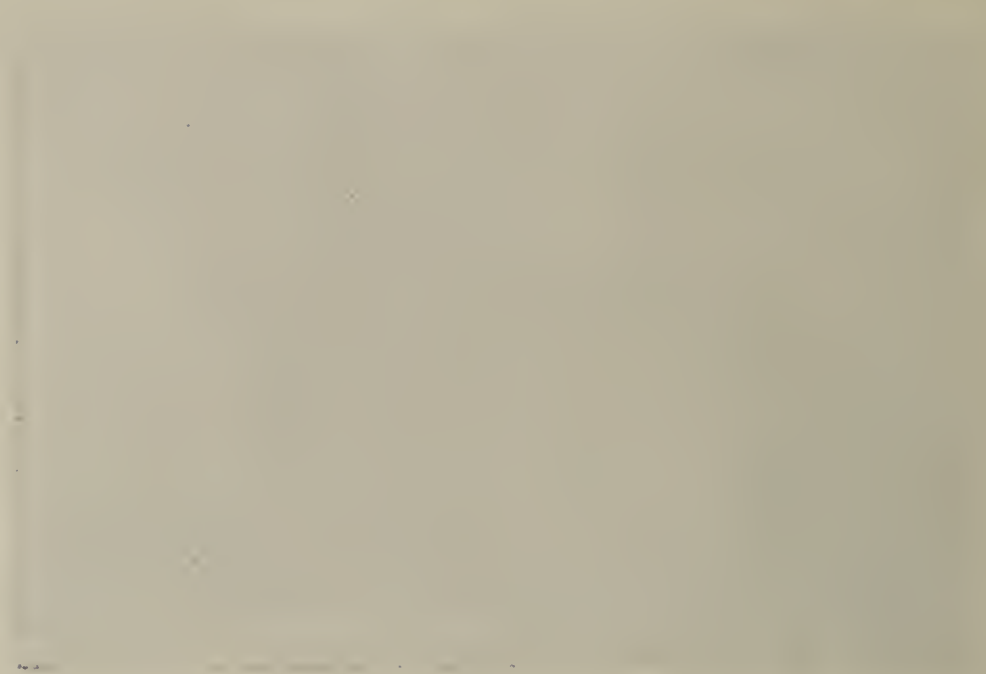
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CONTENTS.

	Pages.
Introduction	1--10
Summary of Vital Statistics	11
Vital Statistics	12—17
Report of the Port Health Officer	18
Vaccination	19—22
Sanitation	23—32
Reports on Hospitals and Dispensaries under the control of the Health Department	33—34
Reports of the several institutions and organizations interested in public health and welfare	35—37
Report on the Child Welfare Scheme—	39—54
Statistical Returns	56—101

CORPORATION OF MADRAS,

Health Department,

1-8-22.

To

The Commissioner,

Corporation of Madras,

M A D R A S.

Sir,

I have the honour to submit the Annual Health Report for the year 1921. I was on leave from 3rd March to 19th November 1921 consequent on my having had to go to England for qualifying for the D. P. H., and Dr. C. Singaravelu Mudaliar was officiating for me. Till the latter date, the various branches of work in the Health Department were under the administrative control of the Health Officer as in previous years; but since the date of my rejoining, I have been relieved of the superior control and guidance over the conservancy branch which is now under the Senior Assistant Health Officer working directly under the Commissioner.

The year 1921 does not appear to have been an eventful one in any particular respect, except for the fact that retrenchments have been effected in certain directions. The Sanitary staff, with which I am at present concerned, has been reduced which seems to be telling upon the efficient despatch of work, especially in the face of out-breaks of epidemic diseases. The retrenchments were, no doubt, largely due to financial stringency; but it is to be hoped that as early as possible, the sanitary staff will be brought up to an efficient standard.

The outstanding features of the state of Public Health in the city for the year under review may be broadly stated to have been as follows; and the data furnished therein may be taken on the whole as providing something in the nature of a bird's eye-view of the physical survey of the population.

The population of the City according to the Census of 1921, is 526,911 as against 518,660 in 1911, an increase of 8,251 inhabitants. While it is true that a very small gain is made in the population of the city over that of 1911, it is

equally true that this gain is not as the result of a balance between the total number of births and total number of deaths. For, during the intercensal period of ten years the total number of deaths exceeds the births by 22,020 and the actual increase, insignificant as it is, should be due to other causes such as immigration etc. This clearly indicates a sad tale of misery and suffering amongst the people whose expectation of life is still as low as 25 as compared with 52 for England.

There is a birth-rate of 36·4 per mille which is also lower than that for 1920, viz, 41·3 per mille. This is however very high, compared with the rates of the Presidency or even for other parts of India. In the absence of any special prosperous conditions, this high birth-rate shows that in this city there is a large female population at child-bearing ages, although for the matter of economic progress this population cannot be considered as an effective one.

The death-rate of the city is 38·5 per mille and although lower than that for last year, it is still keeping high and shows no tendency to fall as compared with the rates for several years except for 1916, when the lowest rate of 34·5 per mille was recorded. The infant mortality rate was 281·9 per 1000 live births. This figure is slightly higher than that for 1920. But the rise is only apparent since the rates worked out are based on the number of births which was larger in 1920 than in 1921. Nevertheless, this betrays an appalling sacrifice of young life who came into the world only to die.

Amongst the causes of death, those under infectious diseases* count for 25·4 per cent of total deaths. Almost all these are from preventable causes. Not only is the primary burden heavy but the ultimate results are grave. There were during the year under review 569 attacks and 180 deaths from Small-pox and 240 attacks and 139 deaths from Cholera and 2,212 deaths from fevers, these three causes alone being responsible for approximately 50 per cent of the total deaths under Infectious Diseases. In fact Smallpox was endemic throughout the whole of 1921 and the disease showed signs of becoming epidemic about the end of the year.

The principal causes of mortality other than the above have been due, as in previous years, to Diarrhoea and Dysentery, Bronchitis and other diseases of the lung which contribute 20·5 and 11·5 per cent respectively to total deaths.

*Beri Beri	Influenza	Puerperal Fever	Syphilis
Cerebro-spinal Meningitis	Kala-Azar	Pneumonia	Tetanus
Chicken-pox	Leprosy	Pyrexia	Tuberculosis (Pulmonary)
Cholera	Malaria	Hydrophobia	Tuberculosis (Other than pulmonary)
Diphtheria	Measles	Rheumatism	Whooping Cough.
Typhoid fever	Mumps	Septicaemia	
Erysipelas	Plague	Small-pox	

In addition to the above there is a wide prevalence of ill-health in the community due to general sickness, invalidity and impairment of health which ultimately leads to disablement, disease and even to death. The statistics of the various Hospitals showing an increasing attendance both at the in-patients and out-patients, the increasing bills from doctors at their consultations, and, not less important, the grave physical defects of infancy and childhood are substantial evidences of the prevailing unhealthiness amongst the people. Sir Alfred Watson calculates that for every death there will be 3·6 years of sickness, *i. e.*, the loss in the earning capacity of an individual due to disablement for that period. This in the aggregate would mean the loss to the nation of the working capacity of a very large number of persons every year.

The usefulness of a Public Health Organisation is to be judged in so far as it is enabled to carry out measures in relief of this vast misery and suffering amongst the people. The purpose of preventive medicine is to prevent such disease as is preventable, to lengthen men's life and make it happier and more effective.

It is customary to invite, through the medium of the annual reports, the attention of the authorities with regard to our wants and to the more urgent measures of sanitary reforms called for towards bettering the state of Public Health. But there still seems to exist some confusion as to the real issues at hand, and as to the vulnerable points to be tackled with. What really appears to be in the way of real progress is a clear cut policy and its execution to efficient completeness. I therefore make no apology in going over the same ground once again even at the risk of being told "of talking platitudes but achieving little."

A fundamental similarity exists in the Health Problems of all civilised countries and such differences as there have been are entirely due to climate, density of population, conditions of occupation or industry and to the social and economical factors peculiar to each country. The first stimulus to sanitary improvement in almost all countries has been the threat or occurrence of epidemic diseases. The Black Death in England, Plague and Cholera in Canada, Malaria and Yellow Fever in Africa, Malaria in the Panama etc., have acted as such stimuli and, as a result, we find now that the science of preventive medicine is practised in the western world in a systematised and organised manner. Further, urbanisation has created evil conditions as well, and called for urgent permanent remedial measures on progressive lines. These measures were based on the principles of environmental cleanliness, which, in actual practice, meant the removal and prevention of nuisance from effluvium and the systematic establishment of communal drainage and water supply. In fact, the very first achievements of any civilised country towards sanitary pro-

gress have been "the under-drainage of the soil, which prevented stagnant water and relieved the city of Malaria, the removal of the cellular population to houses in the open air and sunlight, the removal of offensive industries from residential districts to the rivers, and the improvement of rigid sanitary regulations". These lines were written by Dr. Stephen Smith, the revered Founder of the American Public Health Association as far back as 1866 and even to this day pioneers of Public Health reformation are, in the broad outline of their policy, actuated by such a kind of inspired empiricism. The discoveries of Bacteriology have thrown considerable light as to the specific causes of disease and its prevention. They gave a further impetus for the opening up of new spheres of hygienic activity. Cleanliness of persons and surroundings has thus acquired a scientific basis and is universally insisted upon. So too, is filth-removal which continues to be as fundamentally important as ever. Purity of air, water, milk and food and efficient sewerage, better housing and abatement of nuisance from smoke and dust have all acquired a new significance, and measures for the control of infectious diseases have become specialised to meet individual causative factors. All these constitute the national sanitary minimum of "what is necessary for civilised social life" of any community.

It is clearly established that the largest factor causative of disease and high mortality is a defective environment, particularly that of an overcrowded town, and that a high proportion of sickness, not exactly measurable, but probably not less than 1/3rd, of the total could be avoided by securing a healthy environment. The first move of a Public Authority then is to provide such a healthy environment, which, analysed, resolves itself into the provision of pure and wholesome water, effective sewerage, clean food, efficient methods of collection and removal of filth.

The city water-supply is what one classes as a "protected water supply" but the quality of the water itself is unfortunately far from being wholesome, not to speak of its purity. Reform in the direction of purifying the water-supply, at least to the extent of preventing suspended matter including various kinds of dirt and dead insects, is urgently called for. It is true additional filters are being constructed and meanwhile experiments with chlorination of water are also being carried on. But nature is relentless, and there is ample evidence to show that the watersupply has a large share in keeping up the high mortality returns. Deaths from Diarrhoea and Dysentery, which are largely water-borne, amount on an average to 9.4 per mille per annum (170 per mille for England and Wales) and as soon as the autumn commences, we apprehend fears of an outbreak of Cholera. "Among the circumstances which we find associated in outbreaks of Typhoid fever" wrote Sir John Simon in 1869, "there is none of more frequent occurrence, none which we are more entitled to consider directly causative of the disease, than the consumption of polluted water. It has been one of our most familiar experiences

that excremental fouling of wells is, in this respect, among the worst dangers which can threaten the health of a community." Sir George Buchanan attributes reduction of "fevers" to the substitution of an ample supply of good water for a scanty and impure supply and further states that "other things being equal, the towns in which this substitution has been completed have made most improvement." Whatever the results of chlorination of water may be and whatever opinions experts may offer on this question, the Corporation might feel assured that purification of water by sand filtration has come to stay (they cannot afford to abandon it now); and chlorination or no chlorination, their first and most imperative duty is to stop, without further delay, the mixing up of filtered and unfiltered water for public supply and this means the rapid construction of additional filters. The only other alternative possible seems to be to construct suitable storage tanks and tanks for precipitation by chemicals such as Alum, with a view to carry on purification by Chlorination. This method has elsewhere been found to be more economical, on the whole, than purification by sand filtration *alone*. Financial considerations should not be a bar to progress in this direction, if the much-wished for lowering of mortality returns is to be attained.

Sewerage, if it should be of Public Health utility, should be effective and rapidly extended to cherries, slums, and such other overcrowded localities. It is these latter that suffer most from want of sewers, and there are parts in the city reeking in puddles of sewage and in filth. A most unwholesome environment is thus created and the poor folk living therein are constantly inhaling foul odours emanating therefrom. The cess-pool must be abolished at once, as well as the ditch-drain, the blind drain and the drain without a gradient. It looks as though Preventive Medicine with us is chiefly concerned with the word "drains"; and it would be superfluous to state that the lungs of persons who constantly inhale these foul odours are easily affected and as a result large numbers die, especially amongst children, from Bronchial diseases (Rate 6.7 per mille) excluding those due to Pneumonia and Tuberculosis.

I understand that progress in this direction is retarded from three causes; first, the long distances, 2nd, the difficulty to find suitable gradients, and 3rd, vested interests. The first two can only be solved by putting our hands deep into our pockets, since they involve increased material and constructional cost, and more pumping stations; and the third calls for a vigorous exercise of the law to enforce the owners for providing these elementary amenities of life for their tenants.

Further, the completion of the sewerage system in the city eases the situation very largely with regard to the collection and disposal of human filth. It is presupposed that the sewers that have been already laid and those that are going to be made hereafter will be ultimately able to accommodate the large volumes of

sewage which would result from a general application of the water-carriage system as a matter of sanitary reform, either voluntarily or under the powers of the law. Talking of 'water-carriage system of sewage disposal' it behoves us that the programme of replacing the present public privies and latrines by flush-out ones should be rapidly completed.

A third example of the effect of environment on health may be found in the food supply. Food must not only be ideally sound in quality, but it must be sufficient in quantity and nutritive in value. Consumption of bad or contaminated food has been largely responsible to intestinal disorders, fevers &c. Measures for the protection, preservation, and distribution of articles of food for consumption are urgently called for. An act for the prevention of adulteration of articles of food and drugs is already on the Statute Book and its extension and application to the city is entirely left to the discretion of the Corporation. Necessary chemical and Bacteriological apparatus have also arrived and orders of the Corporation regarding the fitting up of a laboratory and appointing an Analyst and staff are awaited.

Our duty in the matter of protection and control of public food supplies is of paramount importance. It is to be wondered that, even in the absence of such measures as are called for above, so little is heard of outbreaks of food poisoning and so little known about these. Luckily, nature has been helping us in several directions. Firstly, the staple articles of our dietary are grown in the country and only a few articles of luxury are imported. There is no need for any food industry for manufacturing or preparing and preserving articles of food. The freshest food, if one can afford it, can be got at any time and consumed. Secondly, animal food which is largely responsible for outbreaks of food poisoning and for diseases of animals communicable to man is not a routine daily article of dietary. In fact, meat food is a rarity and perhaps a luxury in most households, especially of the lower middle and poorer classes. Thirdly, our methods of cooking have attained a high standard of efficiency and the processes of thorough frying, boiling &c., render innocuous any accidental infection that might occur during its collection and transit.

Still, action is called for in the matter of certain articles of food such as fruits and vegetables which are eaten raw. The eating of unripe and over-ripe fruits is a fruitful source of Dysentery or Diarrhoea. But it has to be borne in mind that the form of control necessary is in respect of the article itself, its means of infection and its market. Unwholesome and putrid fruits and vegetables can be destroyed on the spot with the consent of the owner. Diseased meat when traced out might be similarly dealt with. The powers vested in us by the Municipal Act of 1919 are perhaps sufficient in such simple cases; and in fact they are being exercised. But in the matter of articles such as milk, butter, ghee, oil &c. where much sophistication and adulteration is practised, the powers under

the special act need to be exercised. The Corporation might therefore consider the desirability of starting the laboratory and extending the said Act as expeditiously as possible.

The need for greater and better housing is the fourth problem to be solved. The insufficiency and unsuitability of the available housing accommodation are equally potent in their bearing to disease and disability. The whole group of Catarrhal and Bronchial diseases which contribute so heavily to invalidity and mortality is traceable to bad housing and its consequential effects of overcrowding, ill-ventilation and insanitation. Also the experience that bad housing increases the incidence of all infectious, contagious, and verminous conditions, of respiratory disease, of anaemia, debility and constitutional maladies, is universal. I may be permitted to state in this connection that the Town-Planning Trust might explore possibilities of extending housing within the present limits of the city itself.

Here then are four problems which call for urgent solution at the hands of any public authority. They are as already stated the barest necessities for healthful existence. "If these are present and adequate, we have something approximating to full life; if they are absent or inadequate, we have insufficiency, poor physique, disease and even death." There is only one obstacle in the way of rapid progress in fulfilling these obligations and that is finance. But when sound Public Health is to be the cry of the day, financial resources must be unravelled. The Central Government might take up the matter or contribute largely towards the cost and the Corporation on their part ought to retrench in directions other than the public health budget. So long as these four problems are not thoroughly and satisfactorily solved, so long will we be witnessing the appalling mortality returns.

But before this comprehensive policy comes into being, the air is thick with demands for the practice of Preventive Medicine on more personal and social lines than on the much-needed communal one.

There undoubtedly is a wider conception of Preventive Medicine which, instead of being restricted in its scope to environmental questions even to what is properly called "drains", includes subjects like infant welfare, maternity, child hygiene, school hygiene, industrial labour, more hospitals especially for Tuberculosis and Venereal diseases, etc. It is therefore as well that the Corporation have started since 1917 a fairly elaborate scheme of infant welfare which is working on progressive lines; and there are proposals under consideration for starting medical inspection of school children attending the Corporation schools. But the success anticipated from these special measures is so much dependent upon the firm establishment of communal hygiene, so much so, that the State which seeks to assist a baby being born alive should also try to place it in such surroundings

that it will grow and thrive to a full and happy life. These two—communal and personal hygiene—are so clearly interwoven that one cannot do without the other. A little consideration of the principal facts concerning infant mortality will bring about a correct understanding of the problem. They may be summarised as follows:—

Its incidence falls chiefly in the first three months and more especially in the first week of the first three months (about 25 per cent of the infant deaths) of infant's life; in all countries, it is higher in urban than in rural areas; its incidence is dependent not wholly upon density of population but upon local and domestic conditions characterising social customs and habits; it is higher among the poor and low among the better social classes; the three chief causes of death in infancy are (1) developmental conditions which include immaturity, prematurity, debility, atrophy and marasmus (2) Diarrhoeal diseases and (3) Respiratory diseases.

If we further analyse these facts, we at once perceive that infant mortality is largely a problem of environmental conditions under which the new born infant has perforce to be reared and brought up. Dr. Stephenson says "the chances of survival seem to differ but little at birth in town and in the country, but the noxious influences of the former soon come into play and make themselves felt to an increasing extent as the first year of life progresses and to a still greater extent in the second and third year". In other words, the chances of its survival are influenced by its after-birth conditions; nearly 60% of total infant deaths occurs between the 4th and 12th month of life. It is impossible not to correlate the very marked excess of infant mortality from respiratory diseases in large towns with impurities in the atmosphere. It is also definitely established that diarrhoea in children is most prevalent and fatal in hot, dusty weather. Dr. Newsholme has repeatedly emphasised the injurious effects of dust and effluvia arising from dirty Streets, ash pits and privies in towns where scavenging is inefficient and unpaved back-yards, inefficient drainage and cess pools are the rule of the day.

From these facts then namely, that "the infant death-rate in the first week of life is almost constant under all circumstances and that the range of variation in the first month is small, but that thereafter differences between favourably and unfavourably situated classes become progressively greater as the child gets older," we are led irresistibly to the conclusion that these differences are almost entirely due to the action of post-natal environment. The proof of the above statement is seen from the evidence that in countries where measures for general sanitary improvements were carried out thoroughly, the infantile mortality rates commenced to fall side by side and long before the special measures or their reduction were undertaken. Not that maternity and infant welfare

schemes as organised now are to be wiped out but that their beneficial effects would be more and more felt if concurrently there were in operation, progressive measures for the general sanitary improvement. The history of any important town in India tells a sad tale of nearly one-third to half the infants born dying before they attain the age of one year. While the infantile mortality rate of England and Wales is 80 per 1000 births, that of Madras is 280, and in Bombay, where schemes for infant welfare have been in operation for over a dozen years, as many as 660 children die for every 1000 births.

Infant mortality is said to be the most sensitive index of the physical welfare of any community or nation and of effective sanitary administration and as such the appalling rates of infant deaths that are being witnessed year after year are sufficient testimony of our want of true and proper perspective.

It is clear then that the solution of this large problem of infant mortality should be based on these fundamental principles viz :

(1) That the whole function of motherhood is fulfilled under favourable environmental conditions.

(2) That no child bearing mother is to be without adequate and skilled assistance and no infant without a birth-right of health.

(3) That the infant welfare centres should serve the purpose of supervising the normal baby and not the sick one.

And the work itself should, in short, be directed towards giving practical education to women in the art of "motherhood".

There again exists the same close relationship between "curative medicine" and "preventive medicine." The establishment of a number of dispensaries and hospitals cannot be a panacea for all the ills that the human system suffers from. The science and art of curative medicine is not comprised in the 'bottle of medicine' alone. We attempt to cure many ills which should have been prevented. It is no use in trying to cure a person from attacks of malarial fevers by bottles of quinine mixture, if his surroundings continue to be endemic spots of Malaria. The person with a sore throat gets no benefit from curative medicine if he has to constantly live in the midst of dirt and has to inhale contaminated and vitiated air. Nor again can outbreaks of epidemic disease be prevented unless we eradicate conditions under which they breed and spread. Measures undertaken to kill the rat population or to immunise people by vaccination in the face of an outbreak of Plague or Small pox are not likely to stop the recrudescence of these scourges of humanity unless the well-known general sanitary measures detailed above are pursued steadily and continuously. The Health Authorities should not be left to depend upon "piecemeal effort, spasmodic endeavour or convulsive action inspired

by urgency, fear or panic". In truth, in advanced countries outbreaks of epidemic diseases have acted as a stimuli and inspired both the authorities and the people for undertaking measures of sanitary reform and legislation which have been not only extensive but also expensive. The eradication from Europe of such dreadful diseases like Typhus, Small-pox and Plague within the last 15 years is a supreme example of what can be done by uncrowding, drainage, water-supply, cleansing and the systematic removal of waste. It is high time that these established facts leave an impression on our minds.

The route to the ideal can neither be quick nor short. But a serious start has to be made and steadily followed. Financial resources must be unravelled but the anticipated return should not be in terms of money value but measured in the lowering of the extent of human suffering and misery. A healthy population is a natural asset to the State.

At the same time a more elaborate and less permissive sanitary legislation is needed. But it should however be remembered that mere legislation would prove abortive unless supported and practised by an enlightened public opinion. "Sanitary instruction is even more essential than sanitary legislation, for if in these matters the public knows what it wants, sooner or later, the legislation will follow ; but the best laws in any country are waste paper if they are not appreciated and understood."

Corporation of Madras,

1st August 1922.

}

K. RAGHAVENDRA RAU,

Health Officer.

SUMMARY OF VITAL STATISTICS.

Area of the City	...	...	...	27.6 sq. miles or 17,626 acres.			
Population (Census of 1921)	...	...	...	5,26,911.			
Average density	...	...	...	29.9 per acre.			
Density of Divisions 10,11,12,13,14 and 15			...	91.1 per acre.			
Inhabited houses	...	...	...	64,621.			
Total Births registered in 1921 excluding still-births	...	...	}	19,187 against 21,396 in 1920			
Still-births	...	...		1,136	do	1,172	do
Illegitimate Births	...	...	...	593	do	712	do
Birth-rate	...	...	...	36.4	do	41.3	do
Total deaths registered in 1921	...	...	...	20,268	do	21,418	do
Death-rate	...	...	...	38.5	do	41.3	do
Infantile mortality	...	...	...	5,408	do	5,976	do
Infantile mortality rate	...	...	...	281.9	do	279.3	do
Death rate from infectious diseases			...	17.7	do	17.6	do

VITAL STATISTICS.

The year 1921 being the occasion of the decennial census, the population of the City of Madras as enumerated in March was found to be 5,26,911. The rates throughout this report so far as they relate to the year 1921 are based upon this return of population and as a consequence, the statistics may be regarded with greater confidence than in intercensal years.

Consequent on the redistribution of the city into 30 municipal divisions in October 1919, no attempt can be made to explain the variation in population of each Municipal division as compared with the census figures for 1911, when the same city was divided into 20 divisions.

Of the 5,26,911 persons resident in the city on census day, 2,76,107 or 52·4 per cent were males and 2,50,804 or 47·6 per cent were females. In 1911 the males numbered 2,66,465 or 51·4 per cent and the females 2,52,195 or 48·6 per cent. While the male population shows a decrease of 1 per cent, the female population has increased by the same per cent. The ratio of males for 100 females in 1911 was 105·7; in 1921 it was 110·1. This increase in the male population has entirely occurred in the age period 20 to 60, while the age periods 0 to 15. and 60 and over show a decrease *Vide Table below :—*

Age.	Census Population 1911.			Census Population 1921.			Increase.	Decrease
	Males.	Females.	Total.	Males.	Females.	Total.		
0-1	6,502	6,632	13,134	6,341	6,240	12,581	...	553
1-5	21,734	22,153	43,887	20,205	20,753	40,958	...	2,929
5-10	28,650	28,990	57,640	28,205	28,316	56,521	...	1,119
10-15	27,709	25,107	52,816	27,575	24,037	51,612	...	1,204
15-20	24,935	25,932	50,867	24,790	25,197	49,987	...	880
20-30	53,947	51,158	1,05,105	56,921	54,543	1,11,464	6,359	...
30-40	41,180	36,141	77,321	47,580	38,100	85,680	8,359	...
40-50	30,869	26,843	57,712	32,542	26,263	58,805	1,093	...
50-60	17,762	16,446	34,203	18,815	15,909	34,724	516	...
60 and over,	13,177	12,793	25,970	13,133	11,446	24,579	...	1,391
Total. ...	2,66,465	2,52,195	5,18,660	2,76,107	2,50,804	5,26,911	16,327	8,076

The decennial increase (1911-21) has been 1·6 per cent as against 1·8 and 12·6 in the decades 1901-11 and 1891-01, respectively.

The absolute increase is slightly less than that of the decade 1901-11.

Year.	Census Population.		
1881	405,848		
1891	452,518		
1901	509,346		
1911	518,660		
1921	526,911		
Decennial Increase.		Absolute.	Per cent.
1881-91		46,670	11.5
1891-01		56,828	12.6
1901-11		9,314	1.8
1911-21		8,251	1.6

Table A on page 93 shows the birth and death statistics for 12 years since 1910.

The climatic conditions of the city during 1921 were on the whole normal. The total rainfall during the year was 54.43 inches against 63.89 inches in 1920 and 50.78 in 1919, the five years average being 57.44 inches.

Table B on page 94 shows the quarterly rainfall in the city since 1916.

Registration of births and deaths. Fifteen Medical Registrars with 31 Assistants were in charge of registration of births and deaths in the city.

The number of births registered during the year 1921, exclusive of still-births was 19,187 being 2,209 less than in the previous year. *Births.* The ratio calculated on the census population of 1921 was 36.4 per mille against 41.3 in 1920 and 36.5 in 1919.

Table C on page 94 shows birth-rate by races and Table D on page 95 shows the rate amongst principal sub-divisions of the Hindu community for two years. The Anglo-Indian community returned the highest birth rate of 42.0 and the European community, the lowest, 26.9. These figures cannot, however, be taken for purposes of comparison with the other communities on account of the large variations in their total numbers. Taking for the true natives of the soil, the birth-rate among Muhammadans is the highest.

Out of 19,187 births recorded during the year, the number of *Births by sex.* males was 10,003 and females 9,184, the ratio of males for 100 females being 108.9.

Births by months. Table E on page 95 shows the number of births in each month during 1920 and 1921. The largest number of births was recorded in October and next in November and December.

Illegitimate Births. Five hundred and ninety three illegitimate births were registered during the year against 712 in 1920 and 667 in 1919.

Still-births. There were 1136 still births during 1921 against 1,172 in 1920 and 837 in 1919; in other words there was 1 infant born dead out of every 18 births. The number of still-births is really on the rise, it being 975 in 1916 and 606 in 1914. This is certainly a grave matter. The causes that bring about such a large number of still births are mostly attributable to poverty, unhygienic home conditions and disease in the mother or father or both. An increase in still births must "give us cause to furiously think" for, an increase in still-births does not merely mean that a few more children died before they had drawn a single breath, but also means in all probability that more mothers have died. Still-birth rate and maternal mortality rate are known to go together, and many anti-natal causes making for a high still-birth rate are just the causes which result in a diminished vitality in the new-born infants and many deaths during the first few days of life. Still-births also indicate that there should have been a large number of abortions and premature births which do not come under our recognition.

Deaths. The number of deaths registered during the year exclusive of still-births was 20,268 against 21,418 in the previous year. The mean for the previous five years was 23,531. The ratio of deaths calculated on the census population of 1921 was 38.5 per mille against 41.3 in the previous year and 52.4 in 1919 and the mean ratio for the previous five years was 44.7.

Sex. Deaths among males numbered 10,608 and among females 9,660, the proportion being 110 males to every 100 females.

Class. The number of deaths registered among Europeans was 57, Anglo-Indians 337, Indian-Christians 825, Hindus 16,422, Mahomedans 2,549 and others 8, the ratios being 19.4, 37.4, 27.8, 38.4, 47.9 and 4.2 respectively.

Age. Mortality among infants under one year of age was, as usual, the highest viz., 5,408; next comes 3,747 deaths among adults of 60 years and upwards. Next comes age-period 1 and under 5 years with, 3,273 deaths. There is a sudden drop thereafter in the age periods 20 and under 30, 30 and under 40, 40 and under 50, and 50 and under 60 years with 1,705, 1,531, 1,350, 1,316 deaths respectively. Then comes the age period 5 years and under 10

years with 860 deaths, then the age period 15 years and under 20 years with 608 and lastly the age period 10 years and under 15 years with 470 deaths. 68·4 per cent of the total deaths occurred in persons under 40 years of age.

From Table H on page 93 it will be seen that out of 5,408 deaths of infants under one year as many as 2,178 deaths or 40·2 per cent occurred in infants under the age of one month. Of these 2,178 deaths as many as 1,413 deaths or 64·9 per cent were due to premature births and to diseases classified under nervous system. 26·1 per cent of the total deaths of infants occurred amongst children under one month of age; and this figure keeps fairly constant from year to year under ordinary conditions. 2,261 infants or 41·81 per cent of the total died between the age of 4 months and 12 months and the causes were mostly due to diarrhoea and dysentery and respiratory diseases. That such a large number of children should die from what are easily preventible causes from year to year indicates clearly the evil effects of insanitary and unhygienic conditions of domesticity and environment upon the new born during a viable period of their life.

A full report on the Child-Welfare work during 1921 will be found on *Child Welfare Work* pages 39 to 54.

Causes of Mortality—Infectious Diseases.

Malaria caused 3·2 per cent of the total deaths as against 2·6 per cent for 1920 and 2·7 per cent for 1919, or expressed in ratio per mille 1·2, 1·1, and 1·2 respectively. Annual Form No. X on page 66 shows that 652 persons died of this cause against 560 in 1920. The staff employed for anti-malarial operations has been removed since April 1921, except for a small number of coolies for cleaning certain drains constructed for anti-malarial purposes and some amount of reclamation work that is being carried on by rubbish; both these are being done under conservancy.

There were 85 deaths from enteric fever during the year giving a ratio of 0·2 per mille as against 0·1 in 1920 and 1919. The mean *Enteric Fever* ratio for the previous 5 years is 0·09. The number of deaths from this disease returned for 12 years is given in the table below :—

1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921
42	52	42	51	66	75	49	47	45	52	66	85

Twenty-four deaths were registered from this cause, *Kala-Azar*, the corresponding number in 1920 and 1919 being 22 and 41 respectively.

Two hundred and forty cases were reported in a sporadic form during the year of which 139 or 57·9 per cent proved fatal, against 57 attacks and 27 deaths or 38·6 per cent in the previous year, the ratio being 0·3 per mille as against 0·04 per mille in 1920. The mean ratio for the previous 5 years is 0·5.

Cholera.

Incidence :—

Cholera by Sex and Age.

1921.	Under 1 year of age.		1 to 4		5 to 9		10 to 14		15 to 19		20 to 29		30 to 39		40 to 49		50 to 59		60 and upwards.		Total.		Total of Males and Females.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Cholera.	1	...	2	2	6	9	8	3	6		8	15	16	11	7	14	5	9	3	11	62	77	139

Small-pox was prevalent in the City in a sporadic form up to November 1921. During November a larger number of cases were reported from a small area called Rope Godown Paracherry and by December of that year the disease spread itself to Kassimodu Kuppam and the adjoining parts, all in Royapuram among the fisherfolk. Simultaneously the disease showed a tendency to be spreading in Park Town amongst the poorer people classed as ‘homeless.’ Tinnevely Settlement in 3rd Division and the poor classes of people living in and around Perambore and Purasawalkam Divisions came in for their share subsequently. Concurrently a number of cases have been imported from the neighbouring villages round the city where small-pox was prevalent. The number of attacks during the year was 569 of which 180 or 31·6 per cent proved fatal. The annual death rate was 0·3 per mille against 0·2 per mille in 1920. The mean ratio for the previous five years was 0·6. Suitable preventive measures were taken and the disease was greatly kept under control.

Small-pox.

There were 40 deaths during the year. The percentage calculated on the total deaths is 0·19 per cent or 0·08 per mille. The mean average for the previous five years is 0·2

Measles.

The total number of deaths registered under Influenza was 110 for the year against 250 in 1920 or 0·5 per cent to the total deaths. The mean average for the previous five years is 4·9.

Influenza.

There were in all 4 attacks and 3 deaths from imported cases of Plague during the year against 11 attacks and 8 deaths in 1920.

Plague.

4,149 deaths were recorded from these causes. This represents a death rate of 7.9 per mille against 9.0 in 1920 and 11.3 in 1919 or 20.47 per cent to the total deaths against 21.8 per cent in 1920 and 21.5 in 1919. The largest number of deaths were recorded in January, next in August, February, March and September. The mean ratio for the previous 5 years was 9.0.

Diarrhoea and Dysentery.

General Respiratory diseases excluding Tubercle of the lung.

3,510 deaths were registered from this cause or 79 deaths more than in the previous year. The ratio is 6.7 per mille against 6.6 in 1920 and 7.4 in 1919. The mean ratio for the previous five years was 7.2.

Tuberculosis including Tubercle of the lung.

957 deaths were registered under this head, a decrease of 40 deaths to the previous year. The ratio is 1.8 per mille, the five year average being 2.2. The extent of the prevalence of this disease cannot be measured from the death reports only. These latter are made mostly by the lay public. It is as much probable that a large number of deaths registered under other bronchial diseases and pneumonia may be tubercular in origin. In the absence of medical certification of deaths, it is difficult to say whether the disease is really on the increase, but the increasing work at the Tuberculosis Institute shows that it should be so.

1,971 to the total deaths were registered under the heading against 2,182 or 10.19 per cent in the previous year. Of these, 1,058 deaths were recorded among infants under one year of age against 1,253 in the previous year who were reported to have died of "convulsions".

Diseases of the nervous system.

The number of deaths certified by qualified medical men was 2,386 or 11.8 per cent of the total number of deaths in the city. Of these, 535 were certified by private medical practitioners and 1,851 were certified by public hospitals.

Certified deaths.

322 applications were received during the year for extracts of entries from the birth registers, 381 from the death registers. Out of these, the number of birth extracts granted was 199 and of death extracts 301. In 139 cases extracts were not granted as the parties failed to pay the fees. In 73 cases entries could not be found and the parties were informed accordingly. The fees collected during the year for such extracts amounted to Rs. 1,073-13-0.

Extracts from birth and death registers.

During the year 15,399 dead bodies excluding 1,136 still-births were buried and 4,869 were burnt. Lands for the erection of tombs were sold to 99 applicants and the amount realised by such sale was Rs. 805.

Disposal of the dead and sale of land for tombs.

The Administration Report of the Port Health Officer.

Incoming Vessels.—499 vessels arrived here during the year from plague infected parts with 50,696 crews and 93,311 passengers against 495 vessels with 53,477 crews and 92,496 passengers of the previous year.

Out-going vessels.—246 vessels with 25,818 crews and 16,132 passengers were inspected and granted bills of health during the year against 278 vessels with 22,618 crews and 54,500 passengers of the previous year. The decrease in the number of passengers that left the port in the year under report is due to a less number of emigrants proceeding to the Straits.

Epidemic and Infectious Diseases.—2 cases of smallpox, 2 cases of chickenpox, 2 cases of measles and one case of cholera were found in steamers that entered the harbour during the year under report. All these cases were sent to the Infectious diseases hospitals at Royapuram and Krishnampet for treatment. The necessary precautions were taken to disinfect the cabins and decks occupied by them.

The disinfection of bedding and clothing of deck passengers and crew landing and embarking from here is continued. The disinfection shed is in charge of a Sub-Assistant Surgeon and a nurse is employed for examining female passengers.

Rats on Steamers.—No unusual mortality was found on any of the vessels that entered and left the harbour during the year under report.

The Clayton apparatus was used once during the year for demonstration to the students of the Medical College, Madras.

VACCINATION.

The city is divided into fifteen combined Medical Registration Vaccination districts each under a qualified Sub Assistant Surgeon called the Medical Registrar-Vaccinator. There were 2 female vaccinators and 31 assistant vaccinators. The female vaccinators worked in ghosha and muhammadan quarters.

Vaccine lymph for the operations was obtained from the King Institute of Preventive Medicine, Guindy.

The total number of vaccinations performed during the year 1921 was 26,991 (17,099 males and 9,892 females) against 25,074 for the previous year.

The year was free from outbreak of smallpox in an epidemic form which generally makes a large addition to total vaccinations on account of revaccination of contacts. The number of attacks from smallpox was 569 against 315 in 1920. Of the total operations performed in the city, 26,215 cases were vaccinated by the Corporation staff and 776 reported by the Medical officer in charge of the Penitentiary. Of the former number 16,459 cases were primary vaccinations (16,500 in 1920) and 9,756 were re-vaccinations (7,772 in 1920). Of the total number of primary vaccinations 15,306 were performed at the depots and 1,153 outside and of these again 161 were domiciliary vaccinations performed on payment of fees, the remaining being cases performed in infected localities and in slum areas.

The Assistant Health Officers and Medical Registrar Vaccinators verified the results of vaccinations performed by them in 15,651 primary cases of which 14,144 were brought to the depots as required by the bylaw. Of the 15,651 primary cases verified 14,711 were successful and 940 unsuccessful, the percentage of success being 93.9 against 78.9 during 1920.

The Assistant Health Officers verified 9,065 cases. The percentage of successes in primary vaccinations and revaccinations of all cases verified including those reported by the Government Penitentiary, was 93.9 and 35.02 respectively, as against 78.9 and 34.9 in 1920.

Of the total number of primary vaccinations (16,459), 14,704 were among children under one year of age against 14,494 in the previous year. The percentage of success in the cases verified was 93.7 against 74.4 in the preceding year. Of 14,704 children vaccinated under one year of age 10,472 or 71.2 per cent were born in Madras and 4,232 in moffussal. The number of children under one year vaccinated was 27.9 per mille of population (census of 1921) compared with the same figure in 1920 and the number of them successfully vaccinated per mille was 24.9 against 20.3 in 1920.

The total number of births verified during the year was 16,252 against 15,536 in 1920. Of them, 3,066 or 18·8 per cent died during the year, 3,354 or 20·6 per cent were reported to have permanently left the city (for 1920 it was 3,018) and 308 were not traceable at the addresses given in the birth counterfoils in spite of special efforts made for a closer observation of city births. Of the remaining 9,524, the number vaccinated was 8,749 or 53·8 per cent of births verified. Vaccination was postponed in 745 cases against 810 in 1920. Of these, 184 were verified by medical practitioners and 370 by medical vaccinators and 191 had temporarily left the city. In the remaining 30 cases which were pending at the end of the year, the parents were warned to have the children vaccinated without delay. From enquiries instituted to find out the vaccinal history of 1,106 children born in the city but removed out of it before being vaccinated, it transpired that only 88 were reported to have been vaccinated outside the city.

Hospital births numbering 4,888 were verified during the year. Of these, 680 or 13·9 per cent were reported to have died, 944 or 19·3 per cent were reported to have been permanently removed from the city and 1,391 were not traceable at the addresses given in the birth counterfoils, leaving 1,873 available for vaccination. Of these, 1,723 were vaccinated during the year. Vaccination was postponed on medical certificates in 15 cases, 72 children found sick by the medical staff and 51 had temporarily left the city. Vaccination was pending in 12 cases. As usual the number of untraced cases was large which in many instances was due to insufficient and incorrect addresses furnished by the medical officers in charge of hospitals, the percentage of untraced in 1921 being 28·5 against 29·6 in 1920.

The statement on page 99 furnishes information as to the number of births verified by the vaccination staff during the year 1921 and the number of children vaccinated before they attained the age of one year.

Out of 26,991 cases vaccinated, 22,027 were Hindus, 1,971 Mahomedans, 2,827 Christians and 166 other religionists. The vaccination of other religionists was proportionately larger than that of any other class, the number vaccinated among them being 8·8 per cent of their population, whereas the percentage among Christians, Hindus and Mahomedans were 6·2, 5·1 and 3·7 respectively. These figures cannot however be taken for purposes of comparison on account of the large variations in population of the communities referred to.

Five hundred and sixty nine cases of smallpox were reported during the year as against 315 cases in the previous year. Of these, 328 or 57.6 per cent of the cases were treated in the two Infectious Diseases Hospitals of which 41 cases proved fatal. 207 cases were treated in the Infectious Diseases Hospital, Royapuram, and 121 in the Isolation Hospital, Krishnampet.

Accurate information is not always available from enquiries made with regard to the vaccinal condition of smallpox cases. A certain number of cases of smallpox are reported after death and the Sanitary Inspectors who usually conduct this enquiry have to depend upon the reports of the parent or relatives.

In judging the relative value of vaccination as a prophylactic against smallpox or as a means of reducing the virulence of the disease, much reliance could not be placed upon such vague and unverifiable information. Special attempts are being made to tabulate the information with regard to the vaccinal state of smallpox cases in the following form:—

Vaccinated within 7 years preceding attack with number of successful marks visible.	Vaccinated more than 7 years preceding attack with number of successful marks visible.	Never successfully vaccinated.	Vaccination history not obtained or uncertain.
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Out of 328 cases of smallpox admitted in the two Corporation Infectious Diseases Hospitals in 1921, 142 cases proved fatal, the percentage of deaths amongst the vaccinated being 6.5 as against 32.5 amongst the unvaccinated.

There was no case of prosecution during the year for non-compliance with the bylaws under section 349 (26) of the Madras City Municipal Act IV of 1919.

The fees for primary vaccinations at private residences under bylaw No. 11 of the bylaws under section 349 (26) of the Act and for vaccination certificates issued, amounted to Rs. 307-8-0 which was credited to the Corporation.

The cost of registration and vaccination during the year was Rs. 37,364-4-5. Debiting half this amount to vaccination, the cost amounted to Rs. 18,682-2-2 and deducting from this amount the fees referred to in the previous paragraph, the expenditure on vaccination was Rs. 18,374-10-2 and the net cost of each successful vaccination was Rs. 1-1-9 as against Rs. 1-3-7 in the previous year. The decrease in cost is due to the greater percentage of success obtained in the cases vaccinated than in the previous year.

In pursuance of G. O. No. 1271 L. Press (L. & M. Department), dated the 22nd December 1920, twenty-two first class vaccinator pupils were deputed for the first time by the Sanitary Commissioner, Madras, for practical training in vaccination work for about six weeks from 21st March 1921 to 30th April 1921 in the Corporation vaccine depots. These worked under the immediate supervision of eleven Medical Registrar Vaccinators, and all of them were recommended for certificates of efficiency by the two Range Assistant Health Officers.

Practical Training of first class vaccinator pupils.

SANITATION.

Officers of Health Department.—In accordance with G. O. No. 475 M. Mis dated 1st April 1920 Rao Bahadur Dr. K. Raghavendra Rao, the present Health Officer, proceeded to England on combined leave for nine months from 3rd March 1921 to qualify himself for D. P. H. He returned to Madras about 10th November, and resumed charge of his office on 19th November, cancelling the unexpired portion of his combined leave. During the period of his absence Dr. C. Singaravelu Mudaliar officiated as Health Officer, having been recalled from leave. Dr. A. Muthukrishna Reddiar, B. A., M. B. & C. M. was appointed to act as the Third Asst. Health Officer in the leave arrangement.

Administration.—For administrative purposes, the city was re-distributed into two ranges from 1st April 1921 each under the immediate charge of an Asst. Health Officer, the North Range comprising 1st to 15th division, and the South Range 16th to 30th Division. The general conservancy work of the city which was under the direct supervision of the Health Officer till 19th November 1921, was separated from the general sanitation work and placed under the immediate charge of the Senior Asst. Health Officer under the direct control of the Commissioner. For looking after the general sanitary arrangements of the city there were 15 Sanitary Inspectors each assisted by a process server for a set of two divisions with the exception of 5th, 6th & 7th divisions and the 16th division; the 5th 6th & 7th divisions were taken as one for administrative purposes and they were in charge of a Sanitary Inspector, while the 16th being very extensive had solely a Sanitary Inspector for it. The Sanitary Inspectors (Sanitary section) continued to do the work as per details furnished in paragraph 198 of the Corporation Code, Volume I. The work done under the several items are briefly summarised as below:

Water Supply.—The supply of water at the various sources was examined periodically by the Director of King Institute, Guindy, and reports on the analysis are received by this office. The construction of additional filters referred to in the previous report was in progress during the year and arrangements were being made to start experimental chlorination of the Red Hills supply. Attempts were made to extend water supply to cherries and hutting grounds as far as possible.

Latrines.—The total number of public latrines conserved during the year was 153 of which 52 were of flush-out type, 38 were masonry and the rest were sanded ones.

The following latrines and urinals were constructed during the year.

- Latrines.*—(1) A latrine in Singara Garden Street, 2nd division, at a cost of Rs. 1,357.
- (2) A latrine in Sundaram Pillai Lane, (Purasawakam) 18th division, at a cost of Rs. 1 277.
- (3) A latrine in Sydenhams Road, 19th division, at a cost of Rs. 1,272 and
- (4) A latrine in Langs Garden Road, Pudupet, 20th division, at a cost of Rs. 847.

- Urinals* :—(1) Nattu Pillayar Coil Street.
- (2) Audiappa Naicken Street, junction of Anna Pillai Street.
- (3) Audiappa Naick Street junction of Narayana Mudali Street.
- (4) China Bazaar Road near Flower Bazaar Police Station.
- (5) Wall Tax Road junction of China Bazaar Road.
- (6) Triplicane High Road junction of Mufta-runissa Begum Street.
- (7) Ellis Road, junction of Nallathamby Chetty Street, and
- (8) Peters Road, junction of Jani Jahan Khan Bahadur Street.

Building Regulations :—Plans accompanying applications for erection, re-erection and repairs to buildings were generally received in the Works Department and the Sanitary regulations pertaining to buildings are enforced by that Department in all cases excepting those that require the special attention of the Health Department. These regulations are embodied in a set of building bye-laws which the building Overseers apply as much as the Sanitary Inspectors. In cases however where the staff of the Health Department find during their inspection that an insanitary house is under construction the plan concerned is called for from the Works Department and scrutinized, and necessary advice offered.

Control over waters etc :—Under Section 267 of the Act, 8 cases were prosecuted during the year, 5 convicted, and 3 withdrawn. In many instances the cases prosecuted by the Sanitary Inspectors became futile in consequence of the defaulters furnishing incorrect addresses, just escaping punishment from prosecution. To effectively control fishing in Cooum, the aid of the Commissioner of Police has been sought for to direct the constables on duty to bring to book the

defaulters and put a stop to the nuisance arising out of fishing. It may however be pointed out here that reclamation with crude rubbish against which so much was written in the report for 1920 is still being continued in a number of places under the conservancy section.

Abandoned lands, Untrimmed edges etc.—Sections 269 to 271.—27 notices under these sections were served of which 18 were complied with after prosecution and 8 were convicted. Owing to the absence of the defaulter 1 case was pending.

Insanitary Buildings—Sections 272 to 277:—As usual house-inspections were made by the Sanitary Inspectors, during the year under report with a view to rectifying sanitary defects. In 228 cases prosecutions were instituted; in 133 cases they were complied with & 76 cases convicted with a fine of Rs. 274-8-0 and the rest of the cases were withdrawn. The causes that led to the withdrawal or cancellation of the notices referred to are due to either (1) death of parties or (2) change of ownership.

Cherries & Hutting Grounds.—The Corporation have appointed a Committee to inspect the cherries and hutting grounds with a view to improve the sanitary conditions of these places by the erection of latrines, water taps & bathing places. A cheri register is maintained by the Divisional Sanitary Inspectors & the defects noticed are reported periodically for necessary action to be taken thereon.

Cattle-yards & Cowsheds etc.—Section 287.—During the year under report there were 717 cattle-yards in the city owned by private individuals. In 20 cases unconditional licenses were issued and licenses subject to carrying out of certain sanitary improvements within a specified time were granted in 674 cases, while the remaining cases were pending disposal at the close of the year.

Prosecutions were instituted in 230 cases for not complying with the conditions of the license. In 72 cases the parties were convicted and fined Rs. 283-1-0 and 151 cases were withdrawn.

The model cattle yard at Basin Bridge continued to be maintained efficiently. In addition to the milch cattle that remained at the beginning of the year 103 milch cattle including cows and she-buffalows were housed therein during the year, and 122 were taken away or sold leaving 173 at the close of the year; the amount collected by way of rent for rooms for storage of fodder etc was Rs. 568-8-0.

In view of the large numbers of cowsheds located in the congested parts of Chintadripet and Triplicane it is highly desirable that in the interests of public

health model cattle-yards enough to accommodate about a hundred animals are constructed by the Corporation in these localities.

Due to the strenuous efforts of the sanitary staff, picketting of cattle in streets, was greatly minimised, and in many cases the assistance of the police was sought for.

Stables—Section 282.—120 applications were received for licensing of hack stables; of these 3 were refused, 4 were granted unconditional and 110 conditional licenses, the remaining 3 pending disposal at the close of the year. Prosecutions were instituted in 462 cases and in 289 cases the parties were convicted and fined, the amount of fine collected being Rs. 967-6-0.

In regard to certain stables in Post Office Street, which are used as dwelling places also by syces, the owners thereof have been served with notices and the matter is before the Standing Committee (Health).

Cart-Stand.—The Elephant Gatecartstand is the only one managed departmentally. The right of collecting rents and fees from the cartstand and the bazaars attached thereto was sold in auction for Rs. 7,800 for the official year 1921-22 as against Rs. 9,100 for 1920-21. The highest bid in the previous year was due to competition among bidders and though the auction was resold thrice, better bid for the year under report was not obtained owing to a clique among bidders. Much difficulty was experienced in the matter of collection of instalments from the contractor and it was even considered whether it would not be advisable to undertake the collection departmentally by the Revenue Department for the year 1922-23.

Industries and factories.—Sections 237 to 289—The places where dangerous and offensive trades were carried on, viz: wash-houses, skin godowns, bone stores etc, were continued to be effectively supervised and controlled by the sanitary staff and the sanitary conditions of these places were consequently greatly improved.

Brick and Lime kilns.—In addition to the Government Brick Kiln in Poonamallee High Road there were 18 Brick Kilns, almost all the Kilns being scattered in the outlying divisions of the city. There were 28 lime kilns and these were similarly situated. As the smoke emanating from these kilns are injurious to the surroundings of the locality, strenuous efforts are taken to locate these kilns as far away from human habitation as possible. The Government Brick Kiln in Poonamallee High Road still exists but the manufacture of bricks has been stopped.

The fumes and dust arising from the lime-kilns here are really very irritating and are bound to cause great inconvenience and discomfort to the inhabitants in the neighbourhood.

Oil Mills.—144 applications were received during the year for licensing of oil mills of which 22 were granted unconditional licenses and conditional licenses in 118 cases while 4 were refused on sanitary grounds. These mills are situated more or less in the midst of residential quarters and the nuisance caused to the surrounding locality by the noise produced by the working of the mills can more easily be imagined than described. As a step towards putting down this nuisance it was proposed to shift first the Triplicane oil mills to the land in Lloyds Road between Buckingham Canal and Barber's Bridge Road, 28th division, but the proposal is pending for want of funds.

Applications were received for four oil power mills and conditional licenses were granted in all the four cases.

Paddy boiling.—Of the 329 applications received during the year for licensing of paddy boiling places, conditional licenses were granted in 209 cases and in 120 cases unconditional licenses. This business is at present restricted to certain parts of Madras, viz: Tondiarpet, Perambur and Purasawakam. From a comparison made with the previous report, it will be seen that all possible steps were taken to limit the number of licenses for paddy boiling houses as the proximity of house latrine to the paddy boiling places and the existence of pot wells therein and the want of pipe water supply in such houses lead to insanitation in the process of paddy boiling.

Aerated water factories.—There were 31 applications received during the year of which 4 were granted unconditional licenses while the remaining 27 conditional licenses which demanded sanitary improvements within a specified time. Frequent and vigilant inspections were made during the year by the sanitary staff with a view to avoid as far as possible sale of impure and unwholesome water. Entire improvement in this direction cannot be achieved unless and until the proposed Chemical and Bacteriological laboratory is established and worked.

Bake-houses.—There were 63 bake-houses in the City. Of these 8 were granted unconditional licenses while in 55 cases licenses were granted subject to the fulfilment of sanitary conditions. As one of the conditions of the license, it is quite essential that the employees of the bake houses should produce health certificates from a Registered Medical Practitioner. It is also a condition that chewing betel nut or tobacco or spitting on the floor or otherwise fouling the place is completely avoided by bakers while at work; the sanitary staff inspected these bakeries regularly and systematically.

Sweet-meat bazaars and coffee hotels.—261 applications were received during the year of which 5 were rejected. Licenses were granted unconditionally in 30 cases, while 226 cases were granted licenses subject to certain conditions. In majority of the cases it was found that these bazaars

where sweet-meats were manufactured were also used as dwelling places and necessary steps were taken as far as possible to avoid places where sweetmeats were prepared, being used as dwelling places as well. It could not be said that the sweets and the articles prepared at the sweet-meat bazaars and coffee hotels are pure and unadulterated. A great difficulty is experienced in getting glass cases put up; and even where they are, a wide gap is left on one side with the result that flies and dust do get access. In some cases glass panes are broken. Legal enactments alone cannot be expected to achieve wholesome results in such cases where individual effort and good-will are absolutely needed for the protection of food articles from contamination. The bylaws framed in respect of premises where articles of food are made and stored, were prepared and are under consideration of Government.

Ice factories.—There were only two Ice factories in the city run by private individuals. Conditional licenses were granted in both the cases.

Dhobikhana.—There are two dhobikhanas in the city maintained by the Corporation, one at Chetput and the other at Robinson Park each being supervised by the Divisional Sanitary Inspector in regard to sanitary arrangements of the same. The collection of rents and fees from the dhobies of the Chetput Dhobikhana was transferred to the Revenue Department during the early part of the year 1921. As the two dhobikhanas are quite inadequate to meet the demands of the city, Government has been requested for making over to the Corporation the big plot of Government land situated opposite to Purasawakam Pumping station for construction of a dhobikhana for the district covered by Perambur, Chulai, Purasawakam and Vepery and the matter is under consideration of Government.

Under Section 287 of the Act, 97 applications from dhobies were received during the year of which 2 were rejected, 30 were granted unconditional licenses and 66 conditional.

Bathing fountains.—In addition to the existing fountains in the city, 7 new bathing fountains were constructed in the places noted below, where their need was much felt thus improving the sanitary condition of the locality.

(1) A bathing fountain with four taps in Malayappen Street, 10th division.

(2) A bathing fountain with two taps in Audiappa Naick Street, 13th division.

(3) A bathing fountain with 4 taps in Chucklers' Hutting ground, Krishnampet, 28th division.

(4) A bathing fountain with four taps in Mylapore Burial ground, 28th division.

(5) A bathing fountain with one tap in Madava Perumal Coil Street, in 28th Division.

(6) A bathing fountain with four taps in Bheemanpet Village, 29th division, and,

(7) A bathing fountain with 8 taps in Linghi Chetty Street, 7th division.

Slaughter Houses.—In the slaughter houses maintained by the Corporation in Gantz Road, sheep, goats and cattle are slaughtered and pigs at the Pen at DeMellows Road. The Superintendent of Slaughter Houses with an assistant is in immediate charge of the slaughter houses. The number of sheep and goats slaughtered during the year was 370,201 and the number of cattle was 16,683 and pigs 1,673. The seven small bullock vans and the seven motor vans continued to work, but owing to their going out of order now and then much difficulty was experienced in the distribution of carcasses etc, to the various markets and stalls within the city. It is proposed to replace the old motor vans by new ones. The total amount collected by way of fees for vans and baskets amounted to Rs 4,073-4-6; the right of collecting rents and fees for the use of slaughter houses was as usual leased out and the total fees under the various heads including that of delivery of carcasses and removal of blood amounted to Rs. 80,398-4-6 for the year 1921-22. During the year permission was granted free for the slaughtering of sheep, goats, cattle and pigs in private houses on occasions of religious ceremonies and the number so slaughtered was 8 cows, 1334 sheep or goats and 4 pigs. During festive occasions 1,407 sheep were slaughtered by private parties at their residences and the amount collected at 2 as per head slaughtered was Rs. 175-14-0. To avoid sick animals being slaughtered for food, it was proposed to establish a sheep and cattle pen where sheep and goats brought for slaughter should be inspected and passed for slaughter and the proposal is under consideration. To ensure early and easy obtaining of meat for the southern and northern parts of the city proposals for the construction of additional slaughter houses were under consideration at the close of the year under report.

Illicit slaughtering.—The sanitary staff continued to inspect markets and meat stalls with a view to detect cases of illicit slaughter. There were applications from butchers from places outside the municipal limits for permission to bring the meat for sale in the city and they were told that there would be no objection to their doing so, provided the carcasses for sale were made to bear the stamp of the moffussil municipality.

Milk trade.—Under section 299 of the Act, it devolves on the sanitary staff to regulate the milk trade within the city and to issue licenses. Bye-laws

relating to this are under consideration and only after their sanction, adulteration of milk could be prevented. The Chemical laboratory is a *sine qua non* for the efficient control of the water supply in the city.

Markets, public and private, butchers' shops etc.—The Moore market and the Smithfield market are the only two public markets within the city. The right of collecting rents and fees from the latter was as usual leased for the year 1921-22 and the highest bid amounted to Rs. 2,450. The collection of rent from the Moore Market was, as usual, done by the Revenue Department.

These two markets were kept in a sanitary condition during the year.

There were 44 licensed private markets in the city and the amount collected by way of license fees was Rs. 4,100 during the year.

Conditional licenses were granted to all the 42 markets and the Sanitary Inspectors inspected the markets to avoid overcrowding of stalls and to prevent occupation of gang ways.

Vegetable markets.—In addition to the three vegetable markets in the city, viz: Macdonald market in the 7th division, Kothwal market in the 8th Division, and the Bashyam Iyengar market in the 29th division, proposals were made to construct as many vegetable markets in suitable places in the city and the matter is engaging the attention of the Development Committee of the Corporation. To prevent the sale of vegetables on the sides in Rasappa Chetty Street and in Wall Tax Road it was proposed to install a market in Wall-Tax Road near the cart-stand.

Inspection of places for sale of articles of food etc.—(Sections 311 to 317)—This work also forms one of the duties of the Sanitary Inspectors. It cannot be believed that there could be under the existing conditions in the absence of sufficient statutory powers, much of control at goods stations. In fact, early experience has been that the two food inspectors once employed rendered little or no useful service for the Corporation in the absence of elaborate statutory powers.

The Divisional Sanitary Inspectors have been and are taking action under Sections 311-315 of the Act.

Laboratory articles have been obtained from Messrs Baird & Tatlock & Co. Ltd., London and after erection of a gas plant the installation of a laboratory will be complete. The matter is still pending the decision of the Corporation

Disposal of the dead. During the year under report, 87 licenses have been issued to Vettiyanas or grave diggers at the various burial grounds in the city, the amount thus collected at Re. 1 per grave digger was Rs. 87. There were general complaints from the public in regard to the exorbitant price for cowdung cakes, firewood etc., demanded by Vettiyanas attached to burial and burning grounds. To avoid such complaints and to systematise the sale of cow-dung cakes, firewood etc., a data was fixed, to be tried as an experimental measure at Washermanpet Burial Ground. The system has been found a success and is being extended to the other burial and burning grounds of the city as well. To improve the conditions of the burial and burning grounds it was resolved at an adjourned general meeting of the Council held on 21st October 1921 that the Health Committee be requested to submit proposals for effecting necessary improvements including facilities for bathing in the various cremation grounds in the city and the matter is receiving the attention of the Committee.

*Disinfectants :—*Hycol was the disinfectant contracted for during the year with Messrs. Alex Hussam & Co., Ltd., Madras. The stuff was very sparingly used, and while Chloreid powder that was also in stock was so rarely used in spite of several circulars, and until in fact some quantity of it deteriorated in quality.

Lethal Chamber.—In the two Lethal Chambers set apart for the destruction of stray dogs, 4 560 dogs, 4 056 bitches and 15 pups were caught and taken to the chambers for destruction during the year, inclusive of 207 dogs and 196 bitches that remained at the beginning of the year. The dogs are usually retained for 3 days so as to give an opportunity to the owners for claiming them. Of the number caught 424 dogs and 204 bitches were claimed back and 3,925 dogs, 3,663 bitches and 15 pups were killed during the year leaving a balance of 211 dogs, 189 bitches at the commencement of the year 1922. The amount recovered from the owners by way of feeding charges of the dogs while in dogs-house was Rs. 175-12-3.

The Zoo.—Owing to the retirement from May 1921 of Mr. Nicholas, the License Officer under whose direct control, the People's Park and the Zoo were placed, the supervision of the Zoo was transferred to the Health Officer while that of the People's Park to the Engineer. A report on the working of the Zoo and the expenditure incurred on that behalf is embodied in the Administration Report of the Corporation of Madras for 1921-22.

Hospitals and Dispensaries.—In addition to the 6 dispensaries maintained by the Corporation at the beginning of the year, another dispensary was opened about June 1921 for Vannia Teynampet where the need was much felt. As these

Corporation dispensaries are of immense help to the public, both rich and poor, the Council was pleased to sanction a further allotment for opening in the succeeding year a dispensary where it is much required.

A concise report on the working of the two Contagious Diseases Hospitals and those of the seven dispensaries is given as hereunder:—

Infectious Diseases Hospitals:—There are two hospitals for the isolation and treatment of persons suffering from infectious diseases in the city, one situated at Royapuram and the other at Krishnampet. Each hospital is in charge of a sub-assistant surgeon with a staff consisting of two nurses, a compounder and the necessary attendants. The number of beds available is 60 in the Krishnampet Hospital and 80 in the one at Royapuram, but in times of epidemics, we are obliged to make provision for more beds even to the extent of overcrowding patients. The average daily number treated in these hospitals is 11·2

At times, especially when children are admitted, one or two contacts also are taken in for purposes of segregation and observation.

The following table shows the total number of admissions etc. during the year in each hospital and the chief diseases-treated as compared with the preceding year :—

Name of Diseases.	Krishnampet Hospital.						Royapuram Hospital.						Remarks.
	1921			1920			1921			1920			
	Total No. admitted.	Total died.	Death rate.	Total No. admitted.	Total died.	Death rate.	Total No. admitted.	Total died.	Death rate.	Total No. admitted.	Total died.	Death rate.	
Cholera ...	45	21	46.7	32	7	21.8	81	25	30.8	17	5	27.7	
Small-Pox ...	121	16	13.2	75	9	12.0	193	29	14.08	110	18	16.3	
Chicken-Pox.	88	...	...	74	...	...	33	...	...	36	...	...
Measles ...	26	...	...	63	...	...	8	...	...	20	...	...
Plague ...	4	3	75.0	8	6	75.0	...	...	...	...	...	...
Influenza ...	15	1	6.7	17	1	5.8	2	...	...	9	...	...
Dysentery	1	...	...	3	...	...	...	...	...	...	...	...
Diarrhoea ...	6	...	...	4	...	...	...	...	...	...	...	...
Pneumonia ...	6	2	33.3	2	2	...	...	...	...	4	1	25.0	
Mumps ...	8	...	...	3	...	...	5	...	...	6	...	...
All other diseases	8	...	...	15	2	13.3	52	...	...	33	5	15.15	
Tetanus ...	1	...	...	...	...	...	...	...	...	...	...	...
Total ...	329	43	13.07	296	27	9.12	374	54	...	235	29	...	

Improvement to buildings:—During the year under report, a masonry platform similar to those in existence at Chetput Dhobykhana was constructed at the Krishnampet Hospital for the use of the dhoby working there. Besides, two rooms for servants attached to the hospital were erected in continuation of the existing servants' quarters. The situation of these hospitals cannot be said to be ideal and the construction of the new up-to-date hospital is not materialized yet. The Kishnampet Hospital needs however early extension. This hospital is under telephonic communication and there is further a motor ambulance for conveying cases of infectious diseases to the hospitals, for which no charge is levied.

Corporation Dispensaries.—In addition to the already existing Corporation free dispensaries at the various parts of the city viz., at Washermanpet, George Town, Vepery, Kilpauk, Chintadripet and Triplicane, the Corporation at the instance of M. R. Ry. Rao Bahadur (now Diwan Bahadur) G. Narayanaswami Chettiar Avargal sanctioned the installation of an additional dispensary and it was opened at Vannia Teynampet during June 1921. Each dispensary is in charge of a Sub. Assistant Surgeon with the necessary attendants. As the Corporation proposed to appoint its own Sub Assistant Surgeons to the dispensaries at Washermanpet, Chintadripet and Vepery, the Sub Assistant Surgeons lent by Government to the Corporation to these dispensaries were taken back to Government service on 1st August 1921. The following table shows the total number of patients treated during the year as compared with the preceding year:—

Name of Dispensary.	Total No. of cases treated.		Minor operations performed.		Remarks.
	1921.	1920.	1921.	1920.	
Washermanpet*	36,059	34,587	1,159	1,111	
George Town	38,474	28,383	619	540	The Office of the Medical Registrar-Vaccinator also is held in this building.
Vepery (Baliah Nailu Dispensary)*	37,626	40,401	1,739	1,361	
Chintadripet*	40,066	36,468	1,220	1,083	Do.
Kilpauk*	14,528	8,586	341	192	Do.
Triplicane	23,664	16,050	1,085	784	Do.
Teynampet	10,400	...	152	...	

N.B.—The dispensaries marked with asterisk are located in buildings vested in the Corporation, while the rest are in buildings rented for the purpose.

These dispensaries are very popular institutions and afford medical relief to a large number of people in and about their respective location. The diseases ordinarily treated are fevers especially Malaria, Diarrhoea, Dysentery, Pyrexia of uncertain origin, diseases of the ear, diseases of the skin, Influenza, Ulcers, etc., Minor surgical assistance is also rendered. The number of cases of fever treated in Washermanpet and George Town dispensaries is comparatively large, and more than 60 per cent of these have had a palpable spleen—an index of these parts of the town continuing to be endemic spots of Malaria. The largest average daily attendance is at Chintadripet Dispensary, possibly on account of the large number of poorer residents in this area and in the neighbouring locality.

A brief summary of the work done by the various institutions and organizations as reported by them referred to in the list attached to G. O. No. 653 P H. Mis. dated 10th June 1921.

The Madras Council of Social Service.—This organisation is in charge of slum areas or Cheries and maintains Day and Night Schools and Co-operative Societies. Medical relief to the people in the slums is as far as possible afforded and weekly lectures delivered on health subjects. In addition to these functions, the objects of this organisation are to train social workers for the city and to hold conferences for social workers annually with a view to discuss social problems. A brief summary of the social work carried out by the various institutions affiliated to the Madras Council of Social Service is given below :—

(a) *The Health Brigade*:—The object of this Brigade is to impart instructions to the people in Vernacular language in regard to hygiene, sanitation, and the cause and prevention of contagious diseases by holding health exhibitions in Madras and organising lectures. This brigade is in charge of Big Paracheri, George Town and Konditope cherries and the sanitary needs of the localities are looked after.

(b) *The Triplicane Sociological Brotherhood*:—The chief purpose is to study social problems and render social service. The main activities are (1) Maintenance of a night school in Parthasarathy Kuppam, Triplicane (2) Sanitation work through a Sanitary Committee by visiting streets and lanes of Triplicane and (3) Temperance Propaganda. It is also the idea of this Brotherhood to start a workman's Institute in Parthasarathy Kuppam.

(c) *The Madras Temperance League*:—The object of this league is to promote unity and co-operation among the various temperance organisations in the cause of temperance work, by giving lectures, distribution of temperance literature, etc.

(d) *The Depressed Classes Mission Society*:—The members of this Society visit cherries in general and specially Vyasarpady cheri where a day and night school is maintained.

Rao Bahadur Cunnan Chettiar's feeding Home For Infants :—This institution continues to be situated in South Mada Street, Triplicane, and supplies milk to all classes of poor infants of nine months and below.

St. John's Ambulance Association :—The duties and functions of this association are recorded in the Health report of the year 1920 and no additional function or work of a novel nature was done during the year.

United Free Church Mission Rainy Hospital:—This institution renders valuable help to pregnant women and treatment of puerperal septic cases that attend the hospital.

Sri Kanyaka Parameswari Devasthanam Managing Committee:—The Devasthanam maintains an Ayurvedic Dispensary in George Town where free medical help is rendered to all Hindus who resort to it. The total number that attended the dispensary during the year was 59,025, of which 28,437 were new cases.

Chengalraya Naicker's Technical and Industrial Institute and Orphanage, Vepery:—An Ayurvedic Dispensary is maintained by this institute where medical help is rendered, free to all patients irrespective of caste or creed.

Calavala Cunnan Chettiar's Free Ayurvedic Dispensary:—This dispensary is situated at the southern end of Tholasingaperumal Coil Street, Triplicane, and it renders free medical aid to all classes of people that attend. The total number of patients treated was 113,124 with a daily average of 310, the expenditure on establishment and medical charges being Rs. 6,418-7-6. The Madras Corporation contributed this year Rs. 100 to this dispensary as usual.

The Ramakrishna Mission Students Home, Mylapore:—In this institution, about 100 poor students receive free boarding and lodging. A medical ward with provision for 12 beds is attached to the Home and it is mainly intended for its students. The Home maintains a dispensary of its own wherein poor people of the surrounding locality also, are rendered free medical aid. Lectures on health and sanitary subjects are now and then delivered.

The Madras Society for the Protection of Children:—The aims and objects of this society are clearly defined in the Health Report for 1920.

The total number of boys and girls rescued during the year, through various agencies was 63.

The strength of the society stood at 82 as against 73 in 1920. The amount of subscriptions and donations received from the public during the year was Rs. 4,494-8-0 as against Rs. 2,200-8-0 in the previous year.

The amount expended during the year was Rs. 5629-11-8 as against Rs. 5,720-11-11 during 1920; the balance at the end of the year was Rs. 1,799-15-11 as against a debit balance of Rs. 36-12-5 at the end of 1920.

The number of children in the Society's Home at the end of the year was 45.

The Madras Corporation pays a grant and it was increased from Rs. 250 to 600 for the year 1921-22.

Friend-in-need Society :—The Society renders necessary help for the deserving poor of the Europeans and Eurasian Christians of every denomination by providing them with an Asylum in the Friend-in-need Society's Home, wherein aged, infirm, and destitute are lodged, clothed and supplied with the necessaries for health and comfort.

Poor Schools Society :—This Society has been affiliated to the Madras Council of Social Service and the objects and aims of this latter organisation are defined clearly above.

San Thome Dispensary :—This dispensary renders medical aid to the general public, irrespective of caste or creed. It has been so useful for the past 48 years. It is in charge of a Sub-Assistant Surgeon with a qualified Compounder. During the year under report, the total number of cases treated was 6706.

Raja Sir Ramaswamy Mudaliar's Lying-in-Hospital, Madras :—The Superintendent of the Institution has forwarded a copy of the Annual Clinical Report for 1921. The Report comprises statistical details presented in tabular forms.

The number of cases treated during the year was as shown hereunder:—

Obstetric.

Remained from previous year	...	...	33
Delivered in hospital (including abortions)	...	...	1515
Delivered on the way to hospital	...	...	9
Total			1557

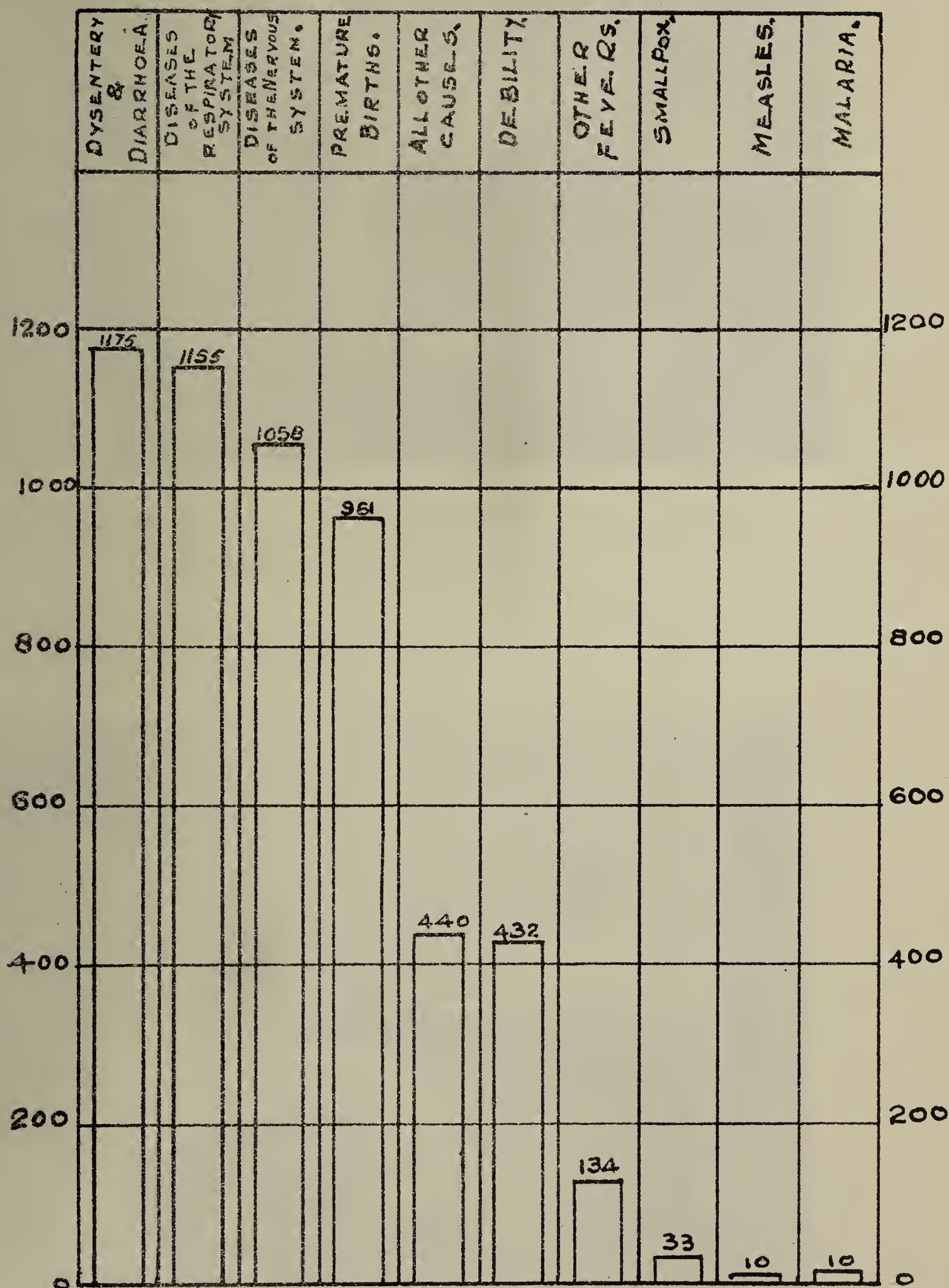
Diseases of pregnancy and Gynaecological cases.

Remained from previous year	...	...	5
Admitted	....	...	535
Total			540
Grand Total			2097

The following institutions viz., (1) The North Madras Branch Health Association and (2) The Madras and Chingleput District Boys Scouts Association have not furnished their reports in spite of reminders.

CAUSES OF INFANTILE DEATHS

1921



Reg. No. 255
Copies. 600

Vandyke., Survey Office, Madras.
1922.

NOTE.—Reproduced from the original received from the
Health Officer, Corporation of Madras.



“The Superintendent’s clinics at the Child Welfare Centre, Triplicane.
The Instruction of Health Visitors.”



“Every baby receiving milk at the Milk Depots, Child Welfare Centre, Triplicane,
is weighed fortnightly. The necessary increase in milk is then made.”

Annual Report of the Superintendent Child Welfare Scheme for the year 1921.

Review.—The year under review is one of great importance to the Child Welfare Scheme, since on the 16th of March 1921 the scheme, which was started as a temporary and experimental measure in September 1917, for a period of three years, was made a permanent institution of the Corporation, an act which bears ample testimony to the civic wisdom and far sighted policy of the Councillors, who took this great step to advance the welfare of the women and children of the City. The Scheme was first carried on in only a very limited area of the city, e.g., the old 16th 17th, 18th & 19th divisions. Since the work here was found to grow very popular, and to meet a real need of the mothers and children of the locality, new centres were opened in Washermanpet and Purasawakam, in May 1919 and October 1919 respectively. These centres served the new Municipal Divisions Nos. 1 to 4 and 16 to 21. Owing to financial difficulties, the Corporation was unable to open a new centre in George Town, which was already sanctioned in the Budget for 1920–21. Owing to difficulties of obtaining suitable houses in George Town, it was decided to have our own building on a plot of land belonging to the Corporation in Anna Pillai Street. The building of this centre in George Town, for which a cost of Rs. 20,000 had been sanctioned in 1920 was not undertaken either. Although it did not happen during the year under review, it may not be out of place here to mention that the long-looked-for centre in George Town was opened in a rented building on the 17th May 1922. That the activities of the Child Welfare Scheme were much wanted in George Town is shown by the fact, that even during the first two months of its existence, nearly two hundred cases were conducted.

No new appointments to the staff were made in the year 1921, owing to the resolution of the Council that the expenses of the previous year were not to be exceeded in 1921. Miss. Kelandavelu, and Mrs. Rodrigues continued to be in charge of the Purasawakam and Washermanpet Centres respectively, and Health Visitor Gopi Bai, Resident Health Visitor in Triplicane Centre. I continued to be in medical charge of this centre till 5-1-1922 when Mrs. Fereiro, Lady Apothecary, was appointed. This step was found very necessary to efficiently cope with the rapidly growing work of the scheme in general, and of the Triplicane Centre in particular, which being the largest of all the centres, needed more than ever a full-timed medical woman to be in charge. The appointment of Mrs. Ferieiro was effected out of the savings of the scheme during the year, and entailed, in obedience to the resolution of the Council, no additional expenditure to the Corporation. This measure relieved me to a great extent for more efficient supervision and general working of the Scheme. The total number of infants (with, of course, their

mothers) in the care of the Child Welfare Scheme, for supervision during the first year of their life, during the year 1921 was 4,112 as against 3,823 in 1920 and 1,173 in 1919. Of these 4,112 births, delivery had been conducted in 3,030 by the staff of the Scheme, 256 were taken to the Hospital by the staff for various complications and 796 had been brought to us on account of complications, or for general oversight, after the barber woman had first conducted labour. The number of cases for each of the centres is as follows:

Triplicane	...	1846	as against 1709 in 1920
Washermenpet	...	1250	„ 1053 „
Purasawakam	...	1016	„ 1066 „

The mill riots in the working area of the Purasawakam Centre during September 1921, necessitated the closing of the centre for the short period of eight days. This course had to be adopted because of the danger to which nurses were exposed in their rickshaws during the street affrays which were only too common then. It is worthy of note, and speaks for the popularity of the child welfare nurse, that more than once men from among the people involved in the riots volunteered to escort a timid nurse, and her still more frightened rickshaw man through a disturbed area to a woman in distress. I have myself personally paid visits to women, wives of mill labourers, in those times, and met with no trouble at all. The dispensaries opened in the centres have grown very popular indeed. Only children under 12 years of age and nursing and expectant mothers are treated in these. A total of 14,774 new cases were admitted during the year (as against 10,636 in 1920) of which 5,474 were infants, 2,533 were children under 5 years, 1,203 children under 12, and 5,564, expectant and nursing mothers.

Comparison of Infantile Mortality Rates.—The infantile mortality rate for the city for 1920 is 279.3 per mille as against 355.2 in 1918 and 329 in 1919. The rate for infants in the care of the Child Welfare Scheme is markedly lower, viz, 173.7 per mille, the rate for the working area of the scheme being 261.2. A word must be mentioned regarding the mortality rates of the different centres. While Washermanpet (a locality in which a great many poor people live under very insanitary conditions, e. g. Tinnevely Settlement) the rate is 226.9 per mille; in Purasawakam (where the inhabitants are more enlightened) it is 169, in Triplicane it is only 137.9 for infants in the care of the Child Welfare Scheme. “What can possibly be the reason for this large difference when work is carried on in all these areas on the same lines” more than one reader may be tempted to ask. The reason is not far to seek, for Table 6 shows that while 22 and 14 children died in Washermanpet and Purasawakam respectively, of malnutrition, none died of malnutrition in Triplicane.

Milk Depot.—Triplicane has been running a milk depot since October 1919. Malnutrition without doubt is the chief cause of the larger number of deaths from all other causes in both Washermanpet and Purasawakam Centres. The infantile mortality rate for infants in the care of the Child Welfare Scheme, Triplicane, during 1919 i.e., when there was no milk depot, was 231.9. Can we have better proof of the great need there is for the better feeding of infants in this city? I have no doubt child welfare workers all the world over have wished as I have often wished that the Municipalities would rather cut down their grants for drugs for child welfare institutions than refuse to sanction the much-needed milk depot in the centre. A certain proportion of mothers is bound to be physically unfit to nurse their infants; some infants taken on our registers are motherless. 195 infants out of a total of 1846 were supplied with milk in 1921—a proportion of 10.1 per cent—by no means too large. Steps are being taken for the provision of milk in Washermanpet and Pursawakkam Centres.

The Health of our Mothers.—Talking of the death-rate and damage rate among infants, leads us naturally to think of the state of health of mothers in this city. Out of a total of 1,324 cases of labour conducted by the Triplicane Centre staff in 1920, 72 were still-born, 74 died during the first 10 days after birth. Out of the remaining 1,178 babies, 61 died during the first year of their life from various causes such as Pneumonia, Influenza etc., (Statement VI). More than twice as many babies therefore died before birth, and during the first ten days as after. In Washermanpet and Purasawakam, the number of deaths before birth, and during the first ten days, is just as high, although a great many deaths have also occurred during the later months, due to malnutrition and its ill-effects, i.e., susceptibility to all diseases as I have already pointed out. The figures for Triplicane centre therefore show more clearly how very low is the general standard of maternal health. Only infants inheriting a good amount of vitality can hope to survive the first few months of a new and difficult existence. But with so many of our mothers living in airless, sunless rooms, provided with one meal a day, as in a majority of cases, it is no wonder that our infantile death rate is so high. This rate would be more than halved, if the infants dying before birth, and during the first few days of their lives could be saved. And saved they may be, but only through the increased health and strength of their mothers. This is a large question; the social worker and the child welfare worker, the patriot and the statesman, all need to join hands to solve the problem.

The work of the Health Visitors.—Three trained health visitors and five probationary health visitors employed on the staff of the scheme in 1920 continued to work also in 1921. According to the resolution of the Corporation mentioned above, the number on the staff could not be increased although the growing number of infants and mothers on the visiting list demanded employment of extra staff. The

maximum number of houses that may be assigned to each health visitor according to the standard laid down by the Ministry of Health for England and Wales is 400. In Purasawalkam and Washermanpet centres, this number was stretched to 500 per health visitor, and in Triplicane it was stretched to nearly 600 per health visitor, these same health visitors each taking her turn daily either to assist me in the morning dispensary in the Triplicane centre, where the average daily attendance was 52, or to run the dispensary entirely by herself on days I inspected the other centres. An effort—but necessarily feeble owing to the great amount of work it involved—was made during the year to take on to the health visitors' visiting list, all infants born in the area of our work. This is but right. For there seems to be no good reason why the infant at whose birth we were called to attend, in No. 22 X street should be privileged to receive monthly visits from the health visitor, while an infant, at whose birth a barber woman attended in No. 19 on the same street, should not have the same privilege. And yet how are the visits and instruction of the health visitor to be extended to the 20,000 (roughly) infants born yearly in this city, unless more health visitors were employed? The least number of health visitors needed for this city is at least 30, one for each municipal division. It may not be out of place to mention here that the women and children of the Presidency are under a deep debt of gratitude to H. E. the Lady Willingdon, the President of the Madras Maternity and Child Welfare Association, for her gracious and understanding interest in their welfare, which has found expression among her other acts of kindness in the recent establishment by the Madras Maternity and Child Welfare Association of a Training School for Health Visitors in the city of Madras. Their thanks are also due, in no small measure, to the Councillors of the Corporation for their large-hearted policy in having made the Health School an accomplished fact by permitting the child welfare centres and the staff to be utilized for the training. The passing of this measure by the Corporation on 16th August 1922, after three years of anxious waiting and no less anxious correspondence, when the prospect for the improvement of the work and status of the health visitors in the city seemed dark and discouraging, is a landmark in the history of child welfare work in this part of the country. For it not only gives to the training we have given our own health visitors in the past the necessary official status and recognition, but also thereby serves to attract a good type of Indian women into the profession.

Dr. Balfour, Joint Secretary, Countess of Dufferin Fund, Viceregal Lodge, Simla, visited us in 1919 and wrote as follows:—

“ This work would make a good centre for a training school for women health workers, which is much needed if the best results are to be attained.”

She visited us again on 3-1-22 and wrote as follows:—“ I visited the centre this morning with Dr. Vira Singhe and was very pleased to see the excellent and

efficient manner in which the work is being carried on. The midwives' work, the mils centre, house to house visiting, and the baby-clinic are all in good order. I was very pleased to hear it is intended to open a health school in connection with these Corporation centres. This will make it possible to spread the good work being done here to the mofussil".

It is a good omen for the future of the Child Welfare Scheme of this city that the hope of so eminent an authority has been realised. The status and pay of Health Visitors is yet not all it ought to be; but we need to take only a step at a time and are deeply thankful for all encouragement received till now.

Mid-wifery—The midwifery service of the scheme has grown increasingly popular, as is shown by the fact that Triplicane has had 1,846 cases as against 1,324 in 1920, & Washermanpet 1,250 as against 1,066 in 1920. The staff of midwives is still too small. Experience has taught us that the average number of cases which may be left to each midwife for the year is 200. Although the staff strictly required according to the calculation has been employed, no provision for work has been made during the absence of nurses in times of sickness. Sickness has now and again interrupted the work of many of our midwives and more than once, we have been faced in all the centres, chiefly in Triplicane, with the difficulty of having to answer more than one call (in Triplicane once as many as six) with no nurse at all available in the centre, all on duty having been out answering calls. In this connection, I may say that it is the duty of the authorities concerned to see that the health of nurses working for them is safeguarded. It is no light task which takes a nurse in sun and rain at all hours of the day and night, into the worst houses in the most insanitary parts of the city. Surely it is as much the object of the Child Welfare Scheme as it is of the Corporation in general, that the health and welfare of their women workers are in no way endangered in the carrying out of their duties. And yet, while a clerk of the lowest grade with no professional training, working in an airy room and under decent conditions, may look forward to earn a salary of Rs. 35 rising by annual increments of Rs. 3 to Rs. 50 and then by Rs. 5 to Rs. 75, a Nurse with a professional training (in the case of some of them, 3 years' training) working under trying conditions, in filthy ill-ventilated houses may look forward to only Rs. 35 p.m., no matter how long or how arduous her service in the Corporation may have been. There are only two places on the staff carrying salaries of Rs 40. and Rs. 45 p m. and these are usually held for health visitors under training. This salary of Rs. 35 needs to suffice for clean uniform, wholesome food and for part expenses of rickshaw, as the rickshaw allowance of Rs. 15 p.m., given to each nurse does not cover the total cost of rickshaw allowance for a month, the cost each nurse incurs being Rs 19-8-0 on an average. I would recommend very strongly that a uniform allowance of at least Rs. 30 per month be given to each nurse. It is gratifying to report that the educational and social

status of women recruited to the staff of the Scheme has been higher than in past years. The average educated Indian woman is beginning, no doubt, to look on nursing differently and it is hoped that the response from educated women will be even greater in future. Among our numbers at present we actually count one who has passed the School Final Examination in English! Out of a total of 3856 puerperal cases altogether in the care of the child welfare staff, 26 died during the puerperium, and only one died from causes relating to child birth. In all other cases death was due to general disease, *e.g.*, Tuberculosis Influenza, Heart Disease, Ankylostomiasis claiming 5, 6, 4 & 3 victims respectively.

We are very grateful to the Government Maternity, the Rainy, Victoria Gosha, Kalyani and Raja Sir Ramaswamy Mudaliar Hospitals for prompt admission and treatment of cases taken to them by the staff of the Child Welfare Scheme for treatment. 2925 cases were registered before labour by the Health Visitors. 1490 pregnant women were treated in all the centres for various ailments.

The Needs of the Scheme.—The needs of the scheme are many and varied. But first and foremost must be mentioned an ambulance car. Last year 256 cases of labour were taken to the various maternity hospitals and all of these at various hours of day and night in jolting carts. The difficulty of finding any conveyance at all at 1 A. M. for a patient in danger and distress can quite well be imagined. Our next need in the establishment is telephonic communication between the doctors and the respective centres. In our early days we did boast of a cycle-peon. Yet now, but the memory remains in that we possess the old pump and lamp!

Stables for putting away the rickshaws of nurses on duty and of the doctor during duty hours at the centres have been rented in Triplicane and George Town. Suitable stables are not available in Purasawakam and Washermanpet and the necessary accommodation needs to be put up at Corporation expense. It is very undesirable that nurses' rickshaws, about 8 to 10 of them, should be left on the high road as if it were for the double purpose of blocking traffic and of receiving all the rain in wet weather. Surely none envies the nurse who has night after night during the monsoon to find her way to the house of more than one patient, in a rickshaw soaking wet!

Last, but mentioned last purely for the sake of emphasis, is the need for additional staff. Any midwifery authority will testify to the fact that a staff of 9 nurses is by no means adequate for a centre which has already during eight months had the care of about 1500 mothers and infants. And these nurses are not always present either. Often and again as many as three are absent all at once owing to sickness. Nor is their work carried on in the limited area within

the four walls of a hospital but over an area nearly 7 to 8 square miles. Once in a way urgent calls are also registered from outside this large working area and these have besides to be attended to.

The staff of the health visitors, as has been pointed out before, is still too small. The work of the health visitor has been proved to be as useful or more than that of the Sanitary Inspector and definite results have been shown to be due to her work, e. g., the rate of infantile mortality for all infants in the city is 279.3 per mille; but for infants visited regularly by us it is 173.7 and in Triplicane for infants visited by us as low as 137.9. Compare this with the rates for the municipal Divisions 6 to 11 (George Town) where the rate is all above 300 and in one above 500 per mille (Statement IX). Are the women and children of Madras who form much more than half the city's population, and by no means the less important members of the city, to be denied having at least one health visitor posted for each municipal division? Surely the duty of educating the mothers in our homes in healthy house-management, in child welfare, and in mother craft generally is as important, and tends to improve the health of the city as much, as the varied duties of a Sanitary Inspector?

The George Town centre was opened on 17-5-22. The grant of Rs. 5000 per annum sanctioned for it does not permit of the appointment of a medical woman in charge. The need for such appointment is very great, owing to the large number of midwifery cases being attended to by this centre and owing to the high morbidity rate among women resident in George Town. The chief cause of morbidity seems to be malaria.

Our Visitors.—Among our visitors in 1921 were eminent authorities on child welfare. Dr. Balfour's remarks have already been mentioned above.

Dr. Wemyss Grant, M.D., Organising Secretary, Lady Chelmsford All India League for Maternity and Child Welfare visited the Triplicane centre on 28-2-21. Her remarks were as follows:—

“A visit to this centre would convince the most sceptical for the need of such work as is being carried out here, as the results of Dr. Virasinghe's and her assistants' work justify the money the Madras Corporation expend on such schemes and they are to be congratulated for being so advanced in a movement which is so recent all the world over. I have been greatly interested in all that I have seen.”

Miss Gladys L. Broughton, Lady Advisor, Department of Industries, Delhi, visited us on the 5th March 1921 and said:—

“Dr. Virasinghe very kindly explained to me all the work that was being undertaken in the 3 centres which are now under her charge. I was very interested and feel convinced that she is doing work of the almost public utility.”

Dr. D. F. Cargel, M. D., D. P. H., W. M. S., Joint Secretary, V. M. Scholarship Fund, Viceregal Lodge, Simla, visited us on 13-1-21 and wrote as follows:—

“I am grateful to Dr. Virasinghe for all she has shown me this morning; it has interested me very much, and I have been much impressed with the progress I have seen.” The encouragement given to the child Welfare Scheme, considered perhaps to be the least of the many and great undertakings of the Corporation (time will show that it is not so), by Councillors of the Corporation has been generous indeed. Several busy Councillors have been interested enough not merely to visit but to spend a good long while in the centres, studying the working of the Child Welfare Scheme. Our visitors among these were:—

Rao Bahadur Dr. C. Natesan, Khan Bahadur Md. Usman Sahib, M.R.Ry. R. Madanagopal Naidu M. R. Ry. S. Venkatachalam Chettiar The Hon'ble Mr. T. Rangachariar, M.L.A., M.R.Ry. V Tirumalai Pillai, Md.Sadulla Badsha Sahib Esq & Dewan Bahadur G. Narayanasamy Chetty. Many an infant now in the care of the Child Welfare Scheme will stand up in future years as no mean citizen of the city to thank the present Corporation for all they have done to make their Child Welfare Scheme. “So advanced is a movement which is so recent all the world over”, as Dr. Wemyss Grant says.

Aid from Voluntary Workers.—The aid we have received to our official work has been much greater than in the early years of the Scheme. Even before the visit of Dr. Wemyss Grant for the purpose of establishing a branch of the Lady Chelmsford All India League here in Madras, the ground had all been prepared and some work done already as stated in my report for last year, under the capable and distinguished leadership of H. E. Lady Willingdon and with the willing assistance of Mrs. Richards, Mrs. Lloyd, Mrs. Symons, and Mrs. Devadoss and many other ladies. Very valuable educative work is being done by the different “Baby Welcomes” opened in the city by the Madras Maternity and Child Welfare Association. The work of this Association in this city is carried on lines and in areas laid out by an Informal Conference of Health Workers convened by Government on 24th October 1921.

It was agreed that attention in the first instance should be concentrated on child welfare work and that the operations of other agencies should be co-ordinated with that of the municipal centres, each agency carrying on its operation as an independent entity while at the same time giving to and receiving from the Corporation centres such help as occasion may require. The conference considered that the municipal centres working in co-ordination with other agencies might well be utilised as a school for training health visitors. It was proposed that with the consent of the Corporation, the Corporation Health centres should be used as a training school and that at the close of each year's training, an examination should be held by a Board appointed for the purpose and certificates granted.

It was largely due to the efforts of this Association and of H. E. Lady Willingdon, President of the Madras Maternity and Child Welfare Association, that the training school for Health Visitors has at last been opened. "The Baby. Welcome" (run by a band of public spirited women) is a splendid example of what voluntary effort, with the least possible assistance, from trained workers, can achieve for the women and children of our land. I say for all women, for she who gives in this cause benefits as much as she who receives. as I have no doubt many of our voluntary workers will testify. The Child Welfare Scheme is also grateful to the Association for baby clothes supplied for needy infants through Mrs. Richards. It is also very gratifying to report that an Arya Vysia Maternity Centre for the benefit of women of the Vysia community resident in George Town has also been opened with voluntary subscriptions by M. R. Ry. S. Venkatachalam Chetty, Municipal Councillor. This Centre ought to be a great means of educating the women of this community in matters relating to child welfare and in making trained and skilled attendance during child birth and at other times of sickness more popular. Over and over again are we made to realise that it is not only poverty that lead to a high infantile death-rate, but ignorance, and in the 11th division, where a large number of Vysias live and whose women folk owing to strict caste customs are yet backward in education, the rate is highest of all divisions in the city, e.g., 522.5 per mille, 81 children having died in the first year of life out of 155 born. We wish the promoters of this centre all success in their laudable effort. At the request of Rai Bahadur B. Mopurappa Garu, Secretary Society for the Protection of Children, both the lady sub-assistant surgeon incharge of the Child Welfare Centre, Washermanpet, and I have paid regular visits to Dr. Varadappa Naidu's, Home for Children. Children from the home have also been treated in the centre for minor ailments. This home deserves the support of every citizen of Madras.

Conclusion.—In conclusion, I would first wish to state that notwithstanding any financial stress the Corporation may have, our outlook for the future is hopeful. The permanency of the Scheme sanctioned in March 1921 was a great step, results of which will be reaped in no small measure hereafter. The total cost of the Child Welfare Scheme for 1921, was Rs. 48313-15-2. Taking this total cost for calculation on midwifery cases alone gives us Rs. 11-11-11 per head. But this cost includes that of a milk depot, and of attendance on 14,774 mothers and children treated in the dispensaries attached to the centres; it includes the cost of visiting babies and instructing mothers for a year after birth. The cost per head is therefore much less, and it cannot be that any objection can be raised to the further extension of such cheap but efficient service to every mother and babe otherwise uncared for in the city. It is earnestly hoped that the two new centres yet needed, i.e., an additional one for George Town and one for the southern end of the city will be opened before another official year is closed.

L. N. Virasinghe-Chinnappa,
M. B. B. S.

Superintendent,
Child Welfare Scheme,
Corporation of Madras.

STATEMENT I.

Showing the cases of labour conducted by the Staff of the Child Welfare Scheme from January to December 1921 with Comparative Statements.

Period.	Centres.	How Conducted.			Total Cases.	Caste.	
		By Nurses of the C. W. S.	Taken to Hospital.	Taken over after barber women.		Mahomed. ans.	Non Mahomedans.
From January to December 1921	... Triplicane	1,324	122	400	1,846	614	1,232
	Washermanpet	918	92	240	1,250	110	1,140
	Purasawalkam	818	42	156	1,016	107	909
	Total ... 1921	3,060	256	796	4,112	831	3,281
"	.... 1920	2,953	203	672	3,828	...	...
	" ... 1919	978	87	108	1,173	561	612
	" ... 1918	550	54	77	681	...	...

STATEMENT II.
Maternal Morbidity (Puerperal) 1921.

—	Eclampsia.	Forceps.	A P H.	P. P. H.	Sepsis.		Sapraecemia.	Difficult. Abnormal Cases.		Malaria.	Influenza.	Anaemia	Dysentery.	V. D. H.	Pneumonia.	Bronchitis.	Tuberculosis Diarrhoea.	T. P.	Lymphangitis.	Small-pox	Gonorrhoea	Puerperal Mania.	Adherent Placenta.	Placenta Praevia.	Retained placenta.	Albuminuria.	Haemorrhoids.	Syphilis.	Furiasis	Breast Abscess	Prolapsenturus
					in C. W. S.	After Barter Women.		By Nurses.	Sent to Hospital																						
Triplicane ...		1 by L.A.	13	7	...	15	...	49	123	9	8	5	9	2	1	1	...	7	...	2	2	...	3	5	2	16	2	4	1	1	1
Washermanpet	5	4	2	10	...	6	5	50	92	50	10	25	20	2	6	24	7	5	4	2	3	2	6	5	10	...	...	...	...	...	...
Purasawalkam	2	...	1	2	1	7	1	18	42	14	3	11	18	2	1	14	7	1	3	...	2	...	1	1	1	...	...	...	...	...	...
Total ...	7	5	16	19	1	28	6	117	256	72	21	93	47	6	8	53	14	13	7	4	8	2	10	11	13	16	2	4	1	1	1

STATEMENT III.
Maternal Mortality (Puerperal) 1921.

—		P. P. H.	Influenza.	V. D. H.	Tuberculosis Diarrhoea.	Tuberculosis	Pneumonia.	Small-pox.	Ankylo Stomiasis.	Total.
Triplicane	...	...	...	2	2	...	1	...	...	5
Washermanpet	...	...	4	1	1	2	2	1	2	13
Purasawalkam	...	1	...	1	...	...	...	...	1	3
Total	...	1	4	4	3	2	3	1	3	21

Note.— Out of 4112 cases to which the Nurses of the Scheme were called 256 were taken to Hospitals.

Deaths among remaining 3,856 21.

Percentage of maternal mortality for }
mothers in the care of the scheme } 5%

STATEMENT IV.

Table showing the total attendance of Children and Mothers at the Child Welfare Centres

Triplicane, Washermanpet and Purasawalkam.

From 1st January 1921 to 31st December 1921.	Age.				Total. (New cases.)	Nature of disease.							Total attendance for the year.	Average daily attendance.	Pregnant women treated at the Centre.		
	Under one year.	1 to 5 years.				5 to 12 years.	Women.	Respiratory.	Alimentary.	Skin affection.	Influenza.	Ear and eye disease.				Syphilis.	Other causes.
...	3,348	1,655	624	2,279	7,906	1,515	1,283	604	414	273	24	3,650	14,464	52	826		
...	780	450	390	1,880	3,500	710	1,160	220	60	70	6	194	5,366	15	232		
...	1,346	428	189	1,405	3,368	494	690	263	19	90	4	1,808	6,089	17	432		
Total for 1921	5,474	2,533	1,203	5,564	14,774	2,719	3,133	1,087	493	433	34	5,652	25,919	84	1,490		
Do 1920	4,079	1,762	1,855	3,934	10,636	1,912	1,160	874	583	308	29	5,715	18,616	73	1,040		
Do 1919	1,017	858	316	1,174	3,365	295	139	250	31	37	12	253	8,442	24.1	322		
Do 1918	222	207	52	235	716	77	27	55	14	8	4	37	1,558	18	116		

STATEMENT V.

Ages of deaths among infants born during 1920.

January 1920 to December 1920.	Total Number of Cases taken.	Still-born.	Premature still-born.	Deaths within				Total. deaths (exclud- ing still births.)	Not traceable.	Number of living children traceable.	
				10 days.	1 to 3 months.	3 to 6 months.	6 to 12 months.				
Triplicane	1,324	50	22	74	45	25	20	164	63	1025	
Washermanpet	1,066	25	15	22	60	46	73	201	140	685	
Purasawalkam	1,063	..	34	34	47	41	41	163	65	801	
Total	3,453	75	71	130	152	112	134	528	268	2511	

STATEMENT VI.

Causes of deaths among infants born in 1920.

	Number of Cases taken.	Still-born.	Premature still-born.	Died within 10 days.	Pneumonia.	Influenza.	Enteritis.	Syphilis.	Pyæmia.	Small-pox.	Causes unknown.	Burns.	Bronchitis.	Malnutrition.	Not traceable.	Total deaths. (excluding still births.)	Number of living children.
Triplicane	1,324	50	22	74	10	4	18	2	..	5	51	..	..	..	63	164	1025
Washermanpet	1,066	25	15	22	35	10	6	14	10	6	32	2	42	22	140	201	685
Purasawalkam	1,063	..	34	34	26	..	28	6	..	..	54	1	..	14	65	163	801
Total	3,453	75	71	130	71	14	52	22	10	11	137	3	42	36	268	528	2511

Total live births in Scheme (infants traceable in the first year of life) 3039

Deaths among 528

Infantile Mortality in the City of Madras. Working area of C. W. Scheme		For Infants in the care of C. W. S.	
1920	280.4	261.2	173.7
1919	329.0	not available.	231.9
1918	355.2	363.4	276.8

1921		1921	
Triplicane.	Purasawalkam	Washerman-	
Centre.	centre.	pet. centre.	
137.9 per	169.0 per	226.9 per	
mille.	mille.	mille.	

STATEMENT VII

Visits paid by the staff of the Child-Welfare Scheme from January to December 1921.

Centre.	Midwives.	Health Visitors.	Lady Doctors.
Triplicane	19,576	16,685	—
Washermanpet	15,087	16,160	483
Purasawalkam	12,490	15,337	538
Total	47,153	48,182	1,021

Visits paid to abnormal and difficult cases by the Superintendent (in all centres) 338

	Triplicane	Washermanpet	Purasawalkam
Forceps	1 (By Superintendent)	4 (by Lady Sub assistant Surgeon in charge.)	Nil
Extraction of after coming head	Nil	2 (Do.)	Nil
Manual removal of Adherent placenta	Nil	1 (by Superintendent.)	1 (by Lady Apothecary in charge)
		14 (by Lady Sub assistant Surgeon in charge.)	

Table showing details of all births in the Municipal Divisions in which the Scheme was working for one year ending with 31st December 1921.

Note. (1) Total births in working area of Child Welfare Scheme 13,814
Cases brought to care of Child Welfare Scheme in this area 4112.
Percentage in care of Child Welfare Scheme 29·3
(2) List does not include 678 cases conducted by Child Welfare Scheme Staff outside working area of Scheme.

STATEMENT IX.

Division No.	Live births registered.	Deaths under 1 year.	Infantile Mortality.
1	756	233	308.2
2	795	227	285.5
3	947	271	286.1
4	637	211	331.2
5	232	106	456.9
6	301	105	348.8
7	346	135	390.1
8	126	60	476.2
9	602	203	337.2
10	610	205	336.0
11	155	81	522.6
12	657	210	319.6
13	537	202	376.2
14	103	35	339.8
15	522	155	296.9
16	935	206	220.3
17	1,007	291	289.0
18	715	150	209.8
19	783	211	269.5
20	1,109	254	229.03
21	626	150	239.6
22	659	169	256.4
23	1,090	291	267.0
24	1,032	257	249.0
25	547	113	206.6
26	572	132	230.8
27	676	180	266.3
28	729	216	296.3
29	815	205	251.5
30	566	144	254.4

Annual Form No. A.—Meteorological Data—Madras.

Latitude 13° 4' 8.0" N.

Longitude 80° 14' 54.3 E.

Months.	Barometer.	Reading of Thermometer						Difference between dew point temperature and mean air temperature	Degree of humidity complete saturation being 100.	Prevailing direction of wind.	Number of days on which rain fell	Rainfall		
	Reduced to 32°F.	Maximum.	Minimum.	Dry.		Dew Point.						Mean Maximum Solar radiation.	Total fall of rain during the month.	Maximum fall of rain during 24 hours
				Mean daily range.	Mean daily value.	Mean daily value								
January 1921 ...	inches. 29.964	84.4	71.6	12.8	77.4	69.1	144.9	8.3	78	N E by E	8	5.46	3.13	
February ...	.935	86.3	67.4	18.9	76.7	64.8	150.3	11.9	68	E S E	...	...	...
March ...	.862	90.1	72.3	17.8	80.8	70.2	151.2	10.6	73	S S E	...	...	...
April ...	.828	92.4	78.0	14.4	84.0	73.9	152.4	10.1	75	S by E	6	1.99	0.91
May ...	.660	104.6	82.8	21.8	89.8	71.4	155.2	18.4	59	S by W	...	...	...
June ...	.662	100.5	82.2	18.3	88.5	69.4	150.6	19.1	57	S W by S	5	0.65	0.47
July ...	.699	93.2	77.9	15.3	83.9	73.1	146.8	10.8	75	S W by S	18	8.34	2.66
August ...	.741	93.6	77.5	16.1	83.7	73.4	147.7	10.3	75	S by W	14	7.29	1.62
September ...	.783	93.1	77.0	16.1	83.3	71.9	150.1	11.4	72	S S W	14	2.55	0.47
October ...	.862	85.9	74.9	11.0	79.7	73.9	139.4	5.8	85	S by E	22	24.27	3.28
November ...	.983	85.1	70.1	15.0	77.2	67.7	149.6	9.5	75	N by W	2	1.84	1.19
December ...	.993	84.2	69.4	14.8	75.9	66.7	144.4	9.2	75	N N E	7	2.04	0.81
Annual ...											96	54.43		

Total amount of Rain during the calender year 1921 is 54.43 inches.

Total Number of days on which the Rain fell is 96 days.

Annual Form No. 1.—Births registered by divisions during the year 1921.

1	2	3			4			5			6	7	8	9			10	11
Divisions.	Districts.	Population according to the Census of 1921.			No. of Births registered.			Ratio of Births per 1,000 of Population.			Number of Males born to every 100 Females born.	Excess of births over deaths per 1,000 of Population.	Excess of deaths over births per 1,000 of Population.	Mean ratio of births per 1,000 during previous five years.			Still-births.	* Illegitimate births.
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.								
1	Rayapuram	10,400	10,491	20,891	376	380	756	36.2	36.2	36.2	98.9	...	2.9	Not available.			39	42
2	Tondiarpet	8,536	8,363	16,899	444	351	795	52.0	42.0	47.0	126.5	...	24.4	Not available.			95	20
3	Washermanpet	11,992	11,785	23,777	494	453	947	41.2	38.4	39.8	109.1	...	1.3	Not available.			54	34
4	Korukupet	8,667	7,973	16,640	338	299	637	39.0	37.5	38.3	113.0	...	1.7	Not available.			23	24
5	Harbour	5,032	2,256	7,288	133	99	232	26.4	43.9	31.8	426.7	...	13.9	Not available.			8	1
6	Muthialpet	9,570	5,961	15,531	149	152	301	15.4	25.5	19.3	98.0	...	6.2	Not available.			16	4
7	Katchaleswaranpet	7,102	5,953	13,055	173	173	346	24.4	29.1	26.5	100.0	...	8.0	Not available.			27	10
8	Kothawal Bazaar	3,120	1,997	5,117	53	70	123	17.9	35.1	24.6	80.0	...	21.9	Not available.			11	2
9	Amnen Koil	8,095	7,725	15,820	297	305	602	36.7	39.5	38.1	97.4	...	16.1	Not available.			36	10
10	Seven Wells	9,748	9,880	19,628	318	292	610	32.3	29.6	31.1	108.9	...	10.4	Not available.			32	23
11	Sowcarpet	4,233	3,177	7,410	80	75	155	18.7	23.6	20.8	48.4	...	15.9	Not available.			14	5
12	Peddunnaickenpet	8,953	8,622	17,575	355	302	657	39.7	35.0	37.4	117.5	...	6.5	Not available.			33	17
13	Trevelyan Basin	8,762	8,510	17,272	275	262	537	31.4	30.8	31.1	105.0	...	11.3	Not available.			25	33
14	Esplanade	1,548	1,116	2,664	53	50	103	34.2	44.8	38.6	106.0	...	11.6	Not available.			5	3
15	Park Town	9,588	7,956	17,544	267	265	532	26.8	33.3	29.8	97.0	...	7.8	Not available.			26	9
16	Perambur	15,492	13,967	29,459	489	446	935	31.5	32.0	31.7	109.7	1.8	...	Not available.			90	21
17	Chulai	12,306	11,715	24,021	531	476	1,007	43.1	40.6	41.9	111.5	6.3	...	Not available.			67	45
18	Parasawakam	10,475	10,181	20,656	364	351	715	34.7	34.5	34.6	103.7	6.3	...	Not available.			47	23
19	Vepery	10,075	9,224	19,299	402	381	783	39.9	41.3	40.6	105.5	1.9	...	Not available.			34	38
20	Egmore	13,870	11,757	25,627	577	532	1,109	41.6	45.2	43.3	108.5	12.0	...	Not available.			73	13
21	Kilpauk	9,667	8,873	18,540	342	284	626	35.4	32.0	33.8	120.4	3.1	...	Not available.			30	11
22	Nungambakkam	11,036	10,186	21,222	346	313	659	31.4	30.7	31.1	110.5	3.2	...	Not available.			28	37
23	Chinnadripet	12,259	11,131	23,390	579	511	1,090	47.2	44.3	45.8	113.3	3.7	...	Not available.			57	36
24	Tiruvatteswaranpet	12,556	11,639	24,195	548	484	1,032	43.6	41.6	42.7	113.2	6.7	...	Not available.			54	34
25	Chepauk	7,054	6,223	13,277	308	239	547	43.7	38.4	41.2	120.1	5.2	...	Not available.			29	15
26	Tripligane	8,675	7,831	16,506	292	280	572	33.7	35.8	34.7	102.9	4.8	...	Not available.			36	34
27	Amir Mahal	7,591	7,663	15,254	346	330	676	45.6	43.1	44.3	104.8	—	2.0	Not available.			24	8
28	Mirshibpet	9,286	9,345	18,631	369	360	729	39.7	38.5	39.1	102.5	...	0.5	Not available.			48	19
29	Rayapetta	10,875	10,440	21,315	425	390	815	39.1	37.4	38.2	109.0	...	...	Not available.			48	14
30	Mylapore	9,394	8,464	17,858	287	279	566	30.6	33.0	31.7	102.9	3.1	...	Not available.			27	8
Total		2,76,107	2,50,804	5,26,911	10,003	9,184	19,187	36.2	36.6	36.4	108.9	...	2.1	38.9	41.1	39.9	1,136	593

* Included in the total number of Births shown in columns 4 and 10

Annual Form No II.—Statement of Deaths by divisions during the year 1921.

Divisions.	Districts.	2	3	4	5		6		7	8											9								
					Population according to the census of 1921.		No. of Deaths registered.			Deaths per 1,000 of Population from											Mean ratio of Deaths per 1,000 during previous five years.								
					Males.	Females	Total.	Males		Fe- males.	Total.	Cholera.	Small-pox.	Measles.	Plague.	Malaria.	Enteric Fever.	Other Fevers.	Dysentery & Diarrhoea.	Tubercle.	Respiratory Diseases.	Injuries.	Deaths from Child Birth.	All other Causes.	Males.	Females.	Total.		
1	Royapuram	...	532	39.8	10,400	10,491	20,891	403	414	817	0.2	1.0	0.1	...	2.3	0.1	0.8	8.2	1.8	5.1	0.6	0.2	18.6	38.8	39.5	39.1			
2	Tondiarpet	...	459	36.9	8,536	8,363	16,899	698	509	1,207	0.1	0.9	0.2	...	3.7	0.1	1.4	16.2	4.4	7.6	1.4	0.2	25.0	81.8	60.9	71.4			
3	Washernanpet	...	321	74.1	11,992	11,755	23,777	503	475	978	0.04	0.4	...	...	0.2	...	2.5	7.7	0.8	10.2	0.2	0.1	17.9	41.9	40.3	41.1	
4	Korukupet	...	2092	7.9	8,667	7,973	16,640	348	317	665	0.06	0.4	0.1	...	0.1	0.1	2.5	7.8	1.4	9.6	0.2	0.06	17.7	40.2	39.8	40.0			
5	Harbour	...	114	63.9	5,032	2,256	7,288	168	165	333	0.1	...	...	...	1.8	...	1.6	9.4	1.5	10.8	0.96	1.1	21.5	33.4	73.1	45.7
6	Muthialpet	...	194	80.6	9,670	59,61	15,631	198	200	398	0.3	0.7	...	...	0.9	0.1	0.5	3.2	1.3	6.5	0.4	0.1	12.6	20.5	36.3	25.5	
7	Katchaleswarpet	...	112	116.6	7,102	5,953	13,055	233	218	451	0.8	0.3	...	...	0.8	0.2	1.3	4.7	1.9	8.7	0.2	0.3	15.4	32.8	33.6	34.5	
8	Kothawal Bazaar	...	96	53.3	3,120	1,997	5,117	147	91	238	0.4	1.8	0.6	...	4.9	...	6.3	5.9	1.0	9.8	...	0.8	15.1	47.1	45.6	46.5			
9	Ammen Kovil	...	110	143.8	8,095	7,725	15,820	432	425	857	0.4	0.5	0.2	...	3.5	0.1	6.5	8.5	3.9	7.8	0.3	0.4	22.2	53.4	55.0	54.2			
10	Seven Wells	...	123	159.6	9,748	9,880	19,628	365	450	815	0.6	0.4	0.1	0.05	3.1	0.1	4.9	6.2	1.9	5.2	0.3	1.1	17.5	37.4	45.5	41.5			
11	Sowcarpet	...	55	135.6	4,283	3,177	7,460	122	152	274	0.4	0.1	...	...	2.5	0.4	5.8	2.7	1.9	5.8	0.3	1.1	16.4	28.5	47.8	36.7	
12	Peddunaickenpet	...	155	113.4	8,953	8,622	17,575	391	381	772	0.1	...	...	...	1.3	0.1	2.8	8.4	1.7	11.3	0.1	0.8	17.2	43.7	44.2	43.9
13	Trevelyan Basin	...	114	151.5	8,762	8,510	17,272	373	359	732	0.4	0.5	0.1	...	1.4	0.2	3.9	6.8	1.7	10.5	0.2	0.6	15.9	42.6	42.2	42.4			
14	Esplanade	...	335	8.0	1,548	1,116	2,664	282	180	462	1.9	1.9	...	...	7.9	0.4	9.4	13.9	8.2	22.5	10.5	2.6	72.1	182.2	119.5	154.3	
15	Park Town	...	120	146.2	9,588	7,956	17,544	347	312	659	0.1	0.2	0.04	...	1.7	0.1	3.7	2.6	2.3	10.8	0.4	0.7	13.9	36.2	39.2	37.6			
16	Perambur	...	2769	10.6	15,492	13,907	29,459	448	435	883	0.1	0.7	0.2	...	1.1	...	0.7	9.4	0.7	4.5	0.7	0.8	11.8	28.9	31.2	30.0			
17	Chulai	...	231	104.0	12,306	11,715	24,021	451	403	854	0.2	0.2	0.04	...	0.2	0.04	1.1	10.7	0.8	7.2	0.5	0.4	14.2	36.6	34.4	35.6			
18	Purasawalkam	...	268	77.1	10,475	10,181	20,656	304	281	585	0.1	0.9	0.05	...	1.0	0.2	0.4	7.8	0.8	4.4	0.6	0.4	12.3	29.0	27.6	28.3			
19	Vepery	...	502	38.4	10,075	9,224	19,299	336	361	697	0.1	0.2	0.05	0.05	0.6	0.2	1.7	12.5	1.2	7.9	0.3	0.3	13.7	38.3	39.1	38.7			
20	Egmore	...	208	123.2	13,870	11,757	25,627	406	394	800	0.04	0.07	0.08	...	0.9	0.4	1.1	5.9	1.0	6.3	0.2	0.3	14.9	29.3	33.5	31.2			
21	Kilpauk	...	1099	16.9	9,667	8,873	18,540	303	265	568	0.1	0.3	...	...	0.6	0.4	0.5	6.9	2.7	5.6	0.3	0.3	13.2	31.3	29.9	30.6	
22	Nungambakam	...	1332	11.6	11,036	10,186	21,222	303	288	591	0.2	0.2	...	...	0.1	...	2.2	6.6	1.6	4.4	0.3	0.2	12.1	27.5	28.3	27.8	
23	Chintadripet	...	201	118.4	12,259	11,531	23,790	525	475	1,000	0.2	0.4	0.08	...	1.8	0.2	4.3	9.7	2.2	5.7	0.1	0.4	16.8	42.8	41.2	42.0			
24	Tiruvatteeswaranpet	...	332	72.9	12,556	11,639	24,195	504	465	969	0.7	0.08	0.08	...	1.3	0.2	2.9	10.2	2.4	5.5	0.1	0.2	16.4	40.1	40.0	40.0			
25	Chepank	...	705	18.8	7,054	6,223	13,277	255	223	478	0.3	0.08	0.1	...	0.7	...	2.3	6.9	3.2	3.8	1.1	0.7	17.0	36.1	35.8	36.0			
26	Triplicane	...	168	98.2	8,675	7,831	16,506	254	239	493	0.3	0.5	0.2	...	0.5	0.4	1.1	5.2	2.3	3.0	0.3	0.4	14.8	29.3	30.5	29.9			
27	Amirmahal	...	169	90.3	7,591	7,663	15,254	388	318	706	0.1	0.5	0.07	...	0.5	0.5	4.5	9.1	3.6	7.3	0.7	0.4	19.2	51.1	41.5	46.3			
28	Mirshahipet	...	680	27.4	9,286	9,345	18,631	392	347	739	0.5	0.3	0.05	0.05	0.8	0.2	7.2	8.1	1.4	6.2	0.4	0.05	14.4	42.2	37.0	39.7			
29	Royapettah	...	2006	10.6	10,875	10,440	21,315	413	324	737	0.5	0.09	0.09	...	0.3	0.1	4.9	8.1	2.2	2.9	0.3	0.3	15.3	38.0	31.0	34.6			
30	Mylapore	...	1525	11.7	9,394	8,464	17,858	266	244	510	0.3	0.5	...	...	0.4	0.3	4.3	5.6	0.3	3.5	0.3	0.1	13.3	28.3	28.8	28.6	
Total ...			17626	29.9	2,76,107	2,50,804	5,26,911	10,608,9,660	20,238,109.8		0.3	0.3	0.08	0.06	1.2	0.2	2.8	7.9	1.8	6.7	0.5	0.4	16.4	38.4	38.5	38.5	42.4	47.1	44.7

Annual Form No. III.—Deaths registered by divisions during each month of the year 1921.

1	2	3			4									
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Deaths registered during the year.
1	Royapuram	86	96	77	69	56	51	43	73	71	67	61	62	817
2	Tondiarpet	138	142	101	80	101	80	93	127	85	94	85	81	1,207
3	Washermanpet	114	90	121	78	70	66	70	82	96	43	57	91	978
4	Korukupet	72	72	46	48	64	49	54	58	47	52	52	51	665
5	Harbour	35	32	23	22	27	28	26	33	27	24	17	39	333
6	Muthialpet	38	57	35	36	25	22	18	33	34	27	39	34	398
7	Katchaleswaranpet	37	57	45	42	32	25	29	41	34	42	31	36	451
8	Kothawal Bazaar	24	44	21	17	18	12	17	19	13	19	15	19	238
9	Ammen Kovil	92	123	80	54	79	58	52	55	66	72	52	74	857
10	Seven Wells	79	107	66	69	74	38	54	74	63	55	72	64	815
11	Sowcarpet	20	34	34	17	23	20	18	26	20	24	25	13	274
12	Peddunaickenpet	87	78	72	66	57	54	42	77	54	64	59	62	772
13	Trevelyan Basin	72	70	73	55	52	42	49	67	72	56	60	64	732
14	Esplanade	35	41	33	24	31	29	22	47	36	33	44	37	412
15	Park Town	72	89	52	44	51	30	33	46	55	52	66	69	659
16	Perambur	90	104	98	63	84	56	59	60	53	73	55	88	883
17	Chulai	99	89	78	54	76	53	53	83	54	58	72	85	854
18	Purasawakam	59	63	49	41	51	37	30	45	45	41	54	70	585
19	Vepery	85	71	69	54	69	39	45	82	50	57	54	72	747
20	Egmore	73	78	52	44	78	61	54	94	62	67	66	71	800
21	Kilpauk	72	52	49	34	52	38	37	65	45	38	45	41	568
22	Nungambakam	57	67	60	42	38	33	36	48	43	52	56	59	591
23	Chintadripet	97	110	88	77	88	63	57	75	93	87	71	94	1,000
24	Tiruvatteeswaranpet	123	104	78	63	98	57	62	84	89	52	62	97	969
25	Chepauk	48	38	44	41	49	29	37	44	39	35	33	41	478
26	Tripligane	47	41	36	43	39	27	34	47	57	35	41	46	493
27	Amir Mahal	71	72	69	54	58	52	42	65	74	40	43	66	706
28	Mirsaibpet	69	68	68	57	60	51	55	54	77	56	50	74	739
29	Royapettah	75	87	63	47	59	42	50	71	66	60	56	61	737
30	Mylapore	53	59	50	40	41	28	36	39	38	50	36	40	510
	Total	2,119	2,235	1,830	1,475	1,700	1,270	1,312	1,814	1,658	1,525	1,529	1,801	20,268

Annual Form No. IV.—Deaths registered according to age by divisions during the year 1921.

1	2	3		4		5		6		7		8		9		10		11		12	
		Under 1 year.		1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Rayapuram	132	101	59	79	13	26	7	11	11	13	29	34	23	18	25	28	27	16	77	88
2	Tondiarpet	134	93	74	92	27	21	12	12	27	15	88	59	77	49	74	30	58	31	127	107
3	Washermanpet	143	128	89	87	18	24	14	15	13	17	33	39	38	34	33	31	32	20	90	80
4	Korukupet	124	87	52	49	9	17	6	6	9	9	24	27	31	24	18	23	19	18	56	57
5	Harbour	59	47	18	32	10	8	6	3	1	6	14	17	18	13	12	7	5	3	25	29
6	Muthialpet	56	49	22	31	13	12	5	5	4	5	20	15	21	13	11	13	17	9	29	48
7	Katchaleswararnpet	77	58	43	22	8	5	8	6	5	5	10	23	15	19	14	18	24	17	29	45
8	Kothaval bazaar	36	24	17	13	7	7	7	7	3	2	10	7	14	5	10	6	16	7	27	13
9	Amnen Kovil	102	101	61	65	24	17	11	14	9	17	46	38	39	36	36	18	32	28	72	91
10	Seven Wells	103	102	43	69	16	16	11	11	10	25	29	44	25	36	27	33	36	30	64	84
11	Sowcarpet	44	37	15	9	4	5	3	...	5	5	9	25	9	16	11	9	12	8	16	38
12	Peddu Naickenpet	109	101	65	44	19	20	5	14	11	12	29	42	22	20	30	23	39	19	62	86
13	Trevelyan Basin	121	81	56	71	14	12	9	8	7	9	28	40	36	24	25	12	18	24	59	78
14	Esplanade	20	15	14	10	6	5	12	4	15	8	40	19	57	17	52	20	33	12	33	20
15	Park Town	82	73	58	51	12	18	5	6	10	10	20	28	28	22	32	21	30	20	70	63
16	Perambur	117	89	74	86	21	23	12	12	6	13	34	39	42	29	26	26	31	20	85	98
17	Chulai	160	131	63	76	13	18	9	8	8	14	22	27	33	20	28	24	34	21	81	64
18	Purasawalkam	85	65	48	54	9	10	9	4	4	8	24	20	24	16	21	17	16	18	64	69
19	Vepery	121	90	73	70	12	11	3	8	8	18	27	27	29	26	28	23	33	19	52	69
20	Egmore	133	121	63	58	21	18	6	11	9	15	27	45	26	27	25	19	24	9	72	71
21	Kilpank	94	56	33	46	10	12	2	7	6	10	22	26	30	22	28	21	27	22	51	43
22	Nungambakam	82	87	45	51	13	12	5	7	10	10	18	27	30	9	21	7	22	18	59	60
23	Chintadripet	161	130	106	86	20	20	11	10	7	17	27	44	30	34	38	22	41	21	84	91
24	Tiruvatteeswararnpet...	127	130	91	89	20	18	8	13	12	18	27	31	38	25	42	25	42	23	97	93
25	Chepank	72	41	41	37	7	13	5	6	15	12	18	25	17	15	14	15	21	12	45	47
26	Tiriplicane	71	61	50	43	9	8	3	6	5	8	15	18	18	22	25	17	13	9	45	47
27	Amir Mahal	109	71	60	64	19	19	9	6	7	16	37	29	31	17	20	13	30	23	66	60
28	Mirsahibpet	115	101	63	71	27	17	9	5	8	9	31	28	30	22	28	10	17	15	64	69
29	Royapettah	121	84	76	67	18	10	16	5	7	16	37	31	29	14	23	7	25	22	61	68
30	Mylapore	73	71	47	32	12	7	7	5	9	5	18	18	17	18	23	12	14	14	46	62
Total		2,983	2,425	1,619	1,654	431	429	235	235	261	347	813	892	869	662	800	550	788	528	1,809	1938
Ratio per 1,000		298.2	264.0	80.2	79.7	15.2	14.2	8.5	9.8	10.5	13.8	14.3	16.4	18.3	17.4	24.6	20.9	41.9	33.2	137.8	169.3

In the case of children under one year of age, the ratios are calculated on the number of live-births during the year, in all other cases on the number living at the time of the census of 1921.

Annual Form No. V :—Deaths registered according to class by divisions during the year 1921.

1	2	3				4				5					
Divisions.	Districts.	Population (according to Census of 1921.)				Number of deaths registered.				Ratio of deaths per 1,000 of population.					
		Christians.	Hindus.	Mahomedans.	Others.	Total.	Christians.	Hindus.	Mahomedans.	Others.	Total.	Christians.	Hindus.	Mahomedans.	Others.	Total.
1	Royapuram	5,612	14,266	896	117	20,891	186	570	61	817	33.1	40.0	68.1		39.1
2	Tondiarpet	363	15,183	1,346	7	16,899	36	1,052	119	1,207	99.2	69.3	88.4		71.4
3	Washermanpet	1,197	21,148	1,427	5	23,777	33	868	77	978	17.6	41.0	54.0		41.1
4	Korukupet	377	13,844	2,395	24	16,640	8	543	114	665	21.2	39.2	47.6		40.0
5	Harbour	355	3,875	2,954	104	7,288	8	131	194	333	22.5	33.8	65.7		45.7
6	Muthialpet	1,103	12,349	2,179	...	15,631	8	367	23	398	7.3	29.7	10.6		25.5
7	Katchaleswararpet	1,859	10,259	879	58	13,055	41	380	29	451	22.1	37.0	33.0		34.5
8	Kothawal Bazaar	190	3,943	951	33	5,117	3	213	17	238	15.8	55.3	17.9		46.5
9	Amnen Kovil	1,977	11,149	2,627	67	15,820	76	635	146	857	38.4	57.0	55.6		54.2
10	Seven Wells	1,410	17,207	931	90	19,628	62	675	78	815	42.0	39.2	83.8		41.5
11	Sowcarpet	10	7,058	41	353	7,463	...	273	1	274	...	38.7	23.4		36.7
12	Peddunaickenpet	30	17,261	247	37	17,575	...	757	5	772	...	44.4	20.2		43.9
13	Trevelyan Basin	23	17,032	112	105	17,272	2	726	4	732	87.0	42.6	35.7		42.4
14	Esplanade	12	2,480	100	72	2,634	37	357	18	412	...	144.0	180.0		154.3
15	Park Town	851	16,372	262	59	17,544	14	641	4	659	16.5	39.2	15.3		37.6
16	Perambur	1,055	22,557	5,722	95	29,459	25	684	174	883	23.0	30.3	30.4		30.0
17	Chulai	1,410	22,167	437	7	24,021	27	807	20	854	19.1	36.4	45.8		35.6
18	Parasawakam	3,088	17,146	382	40	20,656	60	513	11	585	19.4	29.9	28.8		28.2
19	Vepery	3,584	14,245	1,408	62	19,299	128	569	50	747	35.7	39.9	35.5	25	38.7
20	Egmore	4,582	18,682	2,238	125	25,627	135	598	65	800	29.7	32.0	29.0	16	31.2
21	Kilpauk	2,504	15,534	471	31	18,540	47	497	24	568	18.8	32.0	51.1		30.6
22	Nungambakam	3,027	16,594	1,470	131	21,222	78	464	48	591	25.8	28.0	32.7	7.6	27.8
23	Chintadripet	2,011	20,726	990	63	23,790	89	847	64	1,000	44.3	40.9	64.6		42.0
24	Tiruvatteswararpet	776	15,249	8,115	55	24,195	13	541	415	969	16.8	35.5	51.1		40.0
25	Chepauk	412	9,861	3,004	...	13,277	4	291	183	478	9.7	29.5	60.9		36.0
26	Triplieane	50	16,060	383	13	16,506	...	474	19	493	...	29.5	49.6		29.9
27	Amir Mahal	536	8,956	5,752	10	15,254	16	410	279	706	29.9	45.8	48.6	100	46.3
28	Mirshahibpet	1,146	13,988	3,452	45	18,631	10	507	221	739	8.7	36.2	64.0	22.2	39.7
29	Royapettah	1,885	17,893	1,464	73	21,315	64	593	73	737	34.0	33.5	49.9	12.7	34.6
30	Mylapore	2,671	14,640	528	19	17,858	79	418	13	510	29.6	28.6	24.6		28.6
	Total	44,136	4,27,722	53,163	1,890	5,26,911	1,289	16,422	2,549	20,268	29.2	38.3	47.9	4.2	38.5

Annual Form No. VI.—Deaths registered from “Cholera” by divisions during each month of the year 1921.

1	2	3												4			5			6		
		Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.		Mean ratio per 1,000 during previous five years.	
																Males.	Females.	Total.				Males.	Females.	Total.
1	Rcyapuram	...	4	2	2	4	0.2	0.1	0.2	Not available.
2	Tondiarpet	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0.1	0.1
3	Washermanpet	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Korukupet	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Harbour	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Muthialpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Katchaleswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Ammen Kovil	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Seven Wells	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Trevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	Park Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Perambur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	Chulai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	Purasawakam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Vepery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Egmore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Nungambakam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Chintadriret	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Tiruvattieswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	Triplicane	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Mirshahbpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total	...	15	106	8	2	5	1	62	77	139	0.3	0.3	0.3	0.5

Annual Form No. VII.—Deaths registered from “Small-pox” by divisions during each month of the year 1921.

1	2	Districts.	3												4			5		6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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1	Royapuram	1	

Annual Form No. VIII.--Deaths registered from "Measles" by divisions during each month of the year 1921.

1	2	3	4	5												6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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1	Royapuram

Annual Form No. IX.—Deaths Registered from “Plague” by divisions during each month of the year 1921.

1	2	Districts.	3												4			5			6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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1		Royapuram

Annual Form No. X.—Deaths registered from “Malaria” by divisions during each month of the year 1921.

1	2	3												4		5		6	
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.		Mean ratio per 1,000 during previous five years.
														Males.	Females.	Total.	Males.	Females.		Total.
1	Royapuram	7	5	3	3	5	2	2	2	4	7	4	7	27	24	51	2.6	2.3	Not-available.
2	Tondiarpet	6	12	3	4	2	2	7	5	7	6	4	4	37	25	62	4.3	3.7	
3	Washermenpet	...	...	1	...	1	...	...	1	...	...	...	...	4	1	5	0.3	1.0
4	Korukupet	...	...	...	1	...	...	...	...	...	2	1	1	1	1	2	0.1	0.1
5	Harbour	...	1	...	2	2	...	...	...	...	1	...	2	9	4	13	2.0	1.8
6	Muthialpet	...	...	2	3	2	1	...	...	1	1	1	...	12	2	14	1.2	0.3
7	Katchaleswararpet.	1	1	...	2	1	...	1	...	1	1	2	...	6	4	10	0.8	0.7	
8	Kothawal Bazaar	5	4	...	2	2	...	1	2	3	...	...	4	15	10	25	4.8	4.9
9	Amman Koil	6	10	6	2	5	2	...	4	4	...	...	5	25	31	56	3.1	3.5
10	Seven Wells	4	11	8	4	2	2	3	3	7	3	9	6	32	30	62	3.3	3.1	
11	Sowcarpet	...	3	3	1	...	1	2	3	1	2	2	1	10	9	19	2.3	2.8	
12	Peddunaickenpet	1	1	4	1	...	2	...	3	4	4	1	2	11	12	23	1.2	1.3	
13	Trevelyan Basin	...	2	1	5	5	...	...	4	1	3	1	1	10	15	25	1.1	1.4
14	Esplanade	...	...	1	4	2	...	1	4	...	2	6	2	20	1	21	1.0	0.9
15	Park Town	3	3	1	2	1	4	...	2	5	7	1	3	13	16	29	1.4	1.7	
16	Perambur	3	5	3	2	...	...	3	2	2	1	3	3	17	14	31	1.1	1.1
17	Chulai	1	...	...	...	...	1	2	...	...	1	...	...	3	2	5	0.2	0.2
18	Purasawakam	1	2	2	...	3	1	...	...	...	1	2	...	10	10	20	1.0	1.0
19	Vepery	4	2	2	...	...	...	...	...	...	3	...	6	8	3	11	0.8	0.6
20	Egmore	2	1	4	1	3	...	1	3	...	2	...	...	12	12	24	0.8	0.9
21	Kilpauk	2	1	...	1	2	2	...	2	1	...	...	...	7	5	12	0.7	0.6
22	Nungambakam	...	...	...	...	...	1	...	...	1	...	...	...	2	1	3	0.2	0.1
23	Chintadripet	2	4	6	...	2	...	6	1	9	3	6	5	21	23	44	1.7	1.8	
24	Tiruvatteswararpet	1	3	2	2	1	...	4	2	1	2	6	7	15	16	31	1.2	1.3	
25	Chepauk	1	1	...	1	1	...	...	2	4	...	1	...	3	6	9	0.4	1.0
26	Triplicane	...	1	...	1	1	...	...	...	1	...	1	...	4	5	9	0.5	0.7
27	Amir Mahal	2	1	...	1	...	1	1	...	1	...	1	1	5	3	8	0.7	0.4	
28	Mirshibpet	...	...	1	...	...	1	...	...	2	1	...	...	7	7	14	0.8	0.5
29	Rayapettah	...	3	2	...	...	...	...	...	...	4	2	...	5	2	7	0.5	0.2
30	Mylapore	...	...	1	...	...	...	...	...	1	3	2	...	6	1	7	0.6	0.1
Total		54	77	59	45	43	26	38	45	66	64	65	70	357	295	652	1.3	1.2	1.4

Annual Form No. XI.—Deaths registered from “Enteric Fever” by divisions during each month of the year 1921.

1		2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population,			Mean ratio per 1,000 during previous five years.	
														Males.	Females.	Total.	Males.	Females.	Total.		
1	Royapuram	1	2	0.2	0.1	Not available.
2	Tondiarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1
3	Washermanpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	Korukupet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	Harbour	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Muthialpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	Katchaleswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Annan Koil	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	Seven Wells	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Trevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	Park Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Perambur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	Chulai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	Purasawakam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	Vepery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	Egmore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	Nungambakam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Chintadripet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	Uruvateswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	Triplicane	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Mirsaibpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	Rayapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total		0.9

Annual Form No. XII.—Deaths registered from ‘other fevers’ by divisions during each month of the year 1921.

1	2	3												4	5			6		
Divisions.	Districts	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1000 of Population.			Mean ratio per 1,000 during previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
1	Royapuram	2	...	1	2	2	3	...	2	...	2	...	2	7	9	16	0.7	0.9	0.8	Not available.
2	Tondiarpet	1	...	2	2	2	2	...	3	...	4	...	...	12	12	24	1.4	1.4	1.4
3	Washermanpet	22	18	16	8	4	1	1	1	4	1	2	...	33	50	83	2.8	4.2	3.5	
4	Korukupet	7	9	5	1	2	2	2	5	2	2	1	4	16	26	42	1.8	3.3	2.5	
5	Harbour	2	1	1	...	1	1	...	2	...	2	2	...	4	8	12	0.8	3.5	1.6	
6	Muthialpet	1	3	...	...	...	2	...	...	...	1	...	...	5	3	8	0.5	0.5	0.5
7	Katchaleswaranpet	...	4	...	2	...	2	...	...	...	2	...	...	9	8	17	1.3	1.3	1.3
8	Kothawal Bazaar	...	5	4	3	...	...	...	1	1	...	...	4	21	11	32	6.7	5.5	6.3
9	Amman Koil	10	9	16	10	13	...	...	6	6	...	3	13	48	55	103	5.9	7.1	6.5
10	Seven Wells	7	15	6	7	12	7	8	7	4	8	6	9	56	40	96	5.7	4.0	4.9	
11	Sowcarpet	3	4	6	1	4	3	6	5	3	5	2	1	20	23	43	4.7	7.2	5.8	
12	Peddunaickenpet	2	7	7	4	4	2	3	8	2	5	1	5	21	29	50	2.3	3.4	2.8	
13	Trevelyan Basin	6	5	9	6	2	3	6	7	7	5	5	6	34	33	67	3.9	3.9	3.9	
14	Esplanade	1	3	...	1	2	3	1	2	3	1	6	2	11	14	25	7.1	12.5	9.4	
15	Park Town	6	11	...	4	10	3	7	3	5	4	4	5	32	33	65	3.3	4.1	3.7	
16	Perambur	2	3	...	1	1	4	...	...	3	3	1	4	14	8	22	0.9	0.6	0.7
17	Chulai	1	2	...	1	3	4	...	6	3	1	...	2	10	17	27	0.8	1.5	1.1	
18	Purasawakam	1	1	...	...	2	...	...	...	2	...	...	...	4	5	9	0.4	0.5	0.4
19	Vepery	6	2	...	2	3	3	...	5	2	...	2	...	13	19	32	1.3	2.0	1.7	
20	Egmore	1	6	2	1	5	2	2	2	3	1	2	...	14	15	29	1.0	1.3	1.1	
21	Kilpauk	1	...	1	...	1	...	1	1	1	2	...	1	5	4	9	0.5	0.5	0.5	
22	Nungambakam	4	8	7	2	5	6	3	1	2	4	2	2	20	26	46	1.8	2.6	2.2	
23	Chintadripet	9	9	5	6	10	5	5	11	18	8	8	9	50	53	103	4.1	4.6	4.3	
24	Tiruvateeswaranpet	4	7	4	2	5	2	4	15	12	4	5	6	37	33	70	2.9	2.8	2.9	
25	Chepauk	9	7	4	1	...	2	1	...	...	3	1	1	19	11	30	2.7	1.8	2.3
26	Triplican	6	5	6	3	...	1	1	2	...	2	...	3	13	19	32	1.5	2.4	1.9	
27	Amir Mahal	5	10	9	7	1	5	3	2	2	3	...	8	37	31	68	4.9	4.0	4.5	
28	Mirshahibpet	...	...	...	...	...	...	...	...	...	...	...	...	75	59	134	8.1	6.3	7.2
29	Royapetta	10	13	17	6	14	17	11	12	12	5	5	9	55	50	104	5.1	4.8	4.9	
30	Mylapore	7	9	5	10	10	4	9	5	5	8	1	3	38	38	76	4.0	4.5	4.3	
Total		148	184	146	103	139	99	98	138	117	107	81	115	733	742	1,475	2.7	3.0	2.8	3.8

Annual Form No. XIII.—Deaths registered from “Dysentery and Diarrhoea” by divisions during each month of the year 1921.

1		2		3												4			5			6
Divisions.	Districts.	January, February, March, April, May, June, July, August, September, October, November, December.												Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 during previous 5 years.		
1	Royapuram	18	21	18	19	11	9	14	15	13	13	11	82	89	171	7.9	8.5	8.2	Not available.			
2	Tondiarpet	42	42	32	13	22	12	28	21	10	18	15	171	104	275	20.0	12.4	16.2				
3	Washermanpet	21	12	19	11	21	18	27	18	4	8	9	95	89	184	7.9	7.6	7.7				
4	Korukupet	16	17	7	12	9	6	18	10	9	1	2	66	63	129	7.6	7.9	7.8				
5	Harbour	2	4	4	...	3	7	5	9	6	3	8	32	28	60	6.4	12.4	9.4				
6	Muthialpet	5	5	5	3	3	2	6	6	2	2	2	12	31	43	1.2	5.2	3.2				
7	Katchaleswaranpet	4	3	7	3	8	3	8	4	7	5	3	38	23	61	5.4	3.9	4.7				
8	Kothawal Bazaar	3	7	...	2	3	3	3	2	2	2	...	18	12	30	5.8	6.0	5.9				
9	Ammen Kovil	20	19	14	6	8	6	12	2	10	8	...	79	55	134	9.8	7.1	8.5				
10	Seven Wells	16	19	10	14	13	5	8	12	6	6	2	50	71	121	6.1	7.2	6.2				
11	Sowcarpet	2	3	3	...	3	2	5	...	1	1	...	8	12	20	1.9	3.8	2.7				
12	Peddunackanpet	19	17	13	13	10	9	22	9	7	6	...	83	66	149	9.3	7.7	8.4				
13	Trevelyan Basin	15	13	13	11	8	4	17	14	6	5	5	62	56	118	7.1	6.6	6.8				
14	Esplanade	4	3	5	3	1	3	6	2	4	2	4	25	13	38	16.1	11.6	13.9				
15	Park Town	7	7	7	1	5	1	3	1	3	4	5	24	22	46	2.5	2.8	2.6				
16	Perambur	26	30	31	21	26	18	25	20	25	11	22	147	129	276	9.5	9.2	9.4				
17	Chulai	31	27	24	16	25	12	34	19	15	17	22	130	126	256	10.6	10.8	10.7				
18	Purasawalkam	21	17	16	10	12	10	17	10	9	18	19	89	73	162	8.5	7.2	7.8				
19	Vepery	21	23	26	19	21	14	38	22	15	11	21	130	111	241	12.9	12.0	12.5				
20	Egmore	13	12	15	11	16	8	24	11	8	10	11	81	71	152	5.8	6.0	5.9				
21	Kilpauk	18	11	19	7	12	4	16	5	5	12	6	76	52	128	7.7	5.9	6.9				
22	Nungambakam	14	16	14	16	13	8	25	12	9	11	13	80	61	141	7.2	6.0	6.6				
23	Chintadripet	32	36	23	10	15	16	25	16	23	8	16	121	109	230	9.9	9.5	9.7				
24	Tiruvatteswaranpet	40	28	20	19	28	16	23	24	7	12	20	140	107	247	11.2	9.2	10.2				
25	Chepauk	8	7	8	7	10	8	13	5	3	7	8	46	45	91	6.5	7.2	6.9				
26	Triplicane	5	7	5	10	9	5	7	10	5	6	7	45	41	86	5.2	5.2	5.2				
27	Amir Mahal	18	8	13	8	8	9	21	20	9	6	10	62	76	138	8.2	9.9	9.1				
28	Mirsaibpet	16	13	12	14	14	13	12	21	11	6	6	74	77	151	7.9	8.2	8.1				
29	Royapettah	14	18	11	10	13	13	19	18	14	7	15	89	82	171	8.2	7.9	8.1				
30	Mylapore	12	17	13	5	7	2	14	8	9	3	5	53	47	100	5.6	5.6	5.6				
Total		483	462	407	293	352	249	298	477	356	258	224	290	2,208	1,941	4,149	8.0	7.7	7.9	9.0		

Annual Form No. XIV.—Deaths registered from “Tubercle” including Tubercle of the Lung by divisions during each month of the year 1921.

1		2	3												4			5			6
Divisions.	Districts.	January.	February.	March.	April.	May.	June	July.	August.	September.	October.	November.	December.	Total			Ratio of deaths per 1,000 of Population.			Mean ratio per 1,000 during previous 5 years.	
														Males.	Females.	Total.	Males.	Females.	Total.		
1	Royapuram	19	19	38	1.8	1.8	1.8	Not available.
2	Tondiarpet	...	2	3	5	9	5	8	4	7	6	4	4	49	26	75	5.7	3.1	4.4		
3	Washermanpet	...	3	3	1	...	2	1	2	1	2	1	2	10	10	20	0.8	0.8	0.8		
4	Korukupet	...	1	3	...	1	3	...	1	2	3	1	1	15	8	23	1.7	1.0	1.4		
5	Harbour	...	1	2	...	2	...	...	1	...	1	1	2	6	5	11	1.2	2.2	1.5
6	Muthialpet	...	1	2	...	...	...	3	4	...	...	1	2	9	11	20	0.9	1.8	1.3
7	Kachaleswaranpet	...	2	2	4	...	...	2	1	6	...	2	2	13	12	25	1.8	2.0	1.9
8	Kothawal Bazaar	...	2	...	...	1	...	...	...	...	...	...	2	3	2	5	1.0	1.0	1.0
9	Amman Koil	...	19	...	...	7	13	0	...	3	1	...	2	31	30	61	3.8	3.9	3.9
10	Seven Wells	...	6	2	5	7	2	4	3	2	1	3	2	15	23	38	1.5	2.3	1.9		
11	Sowcarpet	...	1	2	...	1	...	2	...	...	1	...	...	3	11	14	0.7	3.1	1.9
12	Peddunaickenpet	...	5	5	...	...	...	...	1	1	4	4	1	13	16	29	1.5	1.9	1.7
13	Trevelyan Basin	...	2	5	...	1	2	...	3	...	2	...	2	15	7	22	9.7	6.3	8.2		
14	Esplanade	...	4	4	1	4	1	...	4	1	1	...	...	23	17	40	2.4	2.1	2.3
15	Park Town	...	5	5	2	6	1	3	4	1	2	...	3	11	9	20	0.7	0.6	0.7		
16	Perambur	...	3	3	1	2	2	1	5	...	...	2	1	14	5	19	1.1	0.4	0.8
17	Chulai	...	1	1	2	2	4	...	2	...	...	1	2	9	8	17	0.9	0.8	0.8
18	Purasawakam	...	2	3	...	1	1	1	3	...	...	2	1	11	12	23	1.1	1.3	1.2
19	Vepery	...	3	4	...	2	2	...	...	2	3	6	2	13	12	25	0.9	1.0	1.0
20	Egmore	...	4	5	2	4	4	...	...	5	3	2	2	27	22	49	2.8	2.5	2.7
21	Kilpauk	...	5	3	4	4	4	3	7	3	3	3	6	17	16	33	1.5	1.6	1.6		
22	Nungambaukam	...	3	3	2	1	...	3	1	3	4	1	2	23	29	52	1.9	2.5	2.2		
23	Chintadripet	...	7	5	8	3	5	1	5	4	...	1	3	26	31	57	2.1	2.7	2.4		
24	Tiruvatteswaranpet	...	3	3	7	4	3	4	...	6	...	3	4	28	14	42	4.0	2.2	3.2		
25	Chopauk	...	5	5	8	3	1	4	...	4	2	5	4	19	18	37	2.2	2.3	2.3		
26	Triplieane	...	4	...	...	4	4	4	4	4	3	3	4	38	16	54	5.0	2.1	3.6
27	Amir Mahal	...	4	7	5	2	4	5	1	5	4	4	4	16	11	27	1.7	1.2	1.4		
28	Mirshahibpet	...	2	3	2	4	2	3	...	3	2	2	2	23	23	46	2.1	2.2	2.2		
29	Rayapettah	...	2	5	4	...	6	3	4	8	4	5	2	5	1	6	0.5	0.1	0.3		
30	Mylapore	...	...	...	...	...	1	2	...	1	...	1	1	5	1	6	...	...	...
Total		85	115	90	82	83	72	73	70	77	64	75	71	520	437	957	1.9	1.7	1.8	2.2	

Annual Form No. XV.--Deaths registered from "Respiratory Diseases" excluding Tubercle of the Lung by divisions during each month of the year 1921.

1	2	3			4			5	6											
Division.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.		Mean ratio per 1,000 during previous five years.	
														Males.	Females.	Total.	Males.	Females.		
1	Koyapuram	6	9	11	10	12	10	3	13	9	7	8	8	56	50	106	5.4	4.8	5.1	
2	Tondiarpet	11	14	12	8	11	7	8	19	8	11	12	8	74	55	129	8.7	8.6	7.6	
3	Washermanpet	10	21	20	22	24	19	22	21	31	14	19	20	124	119	243	10.3	10.1	10.2	
4	Korukupet	8	12	9	11	24	17	12	11	14	15	15	12	90	70	160	10.4	8.8	9.6	
5	Harbour	9	9	3	8	5	2	3	12	9	7	3	9	29	50	79	5.8	22.2	10.8	
6	Muthialpet	8	17	9	14	6	6	5	6	8	7	7	9	57	45	102	5.9	7.5	6.5	
7	Kachaleswaranpet	11	8	13	9	10	5	6	14	9	12	6	11	58	56	114	8.2	9.4	8.7	
8	Kothawal Bazaar	4	8	5	5	5	3	2	2	2	4	6	4	32	18	50	10.3	9.0	9.8	
9	Ammen Koil	15	6	7	7	12	2	7	12	17	15	10	13	68	55	123	8.4	7.1	7.8	
10	Seven Wells	11	2	6	8	7	7	8	17	12	5	9	11	41	62	103	4.2	6.3	5.2	
11	Sowcarpet	3	3	8	7	4	5	2	2	1	3	2	3	24	19	43	5.6	6.0	5.8	
12	Peddunaickenpet	14	16	16	24	18	14	14	20	13	17	22	17	105	96	199	11.5	11.1	11.3	
13	Trevelyan Basin	14	7	21	14	16	17	9	15	20	12	16	21	96	86	182	11.0	10.1	10.5	
14	Esplanade	5	5	4	6	5	4	2	5	8	4	7	5	41	19	60	26.5	17.0	22.5	
15	Park Town	24	26	10	10	15	11	8	16	18	15	16	21	100	90	190	10.4	11.3	10.8	
16	Perambur	19	18	13	10	12	9	6	4	6	13	6	16	69	63	132	4.5	4.5	4.5	
17	Chulai	19	19	15	12	14	13	10	12	10	8	20	20	92	80	172	7.5	6.8	7.2	
18	Purasawakam	3	7	8	10	7	3	...	10	13	6	14	9	47	43	90	4.5	4.2	4.4	
19	Vepery	19	13	10	16	17	10	5	14	11	13	9	16	83	70	153	8.2	7.6	7.9	
20	Fgmore	12	18	8	10	14	15	8	21	9	13	18	16	86	76	162	6.2	6.5	6.3	
21	Kilpauk	12	6	3	7	11	9	5	6	11	10	11	12	51	52	103	5.3	5.9	5.6	
22	Nungambakam	5	8	8	3	10	6	7	9	8	11	11	7	46	47	93	4.2	4.6	4.4	
23	Chintadripet	10	20	14	18	18	4	6	6	7	13	12	8	69	67	136	5.6	5.8	5.7	
24	Tiruvatteswaranpet	14	12	8	9	14	15	13	5	13	14	6	12	65	69	134	5.2	5.9	5.5	
25	Chepauk	3	4	3	9	6	3	5	2	5	3	3	4	25	25	50	3.5	4.0	3.8	
26	Triplicane	1	6	4	3	5	3	2	3	7	8	4	4	30	19	49	3.5	2.4	3.0	
27	Amir Mahal	10	12	5	9	5	7	12	14	16	9	6	7	66	46	112	8.7	6.0	7.3	
28	Mirsaibpet	11	5	9	6	10	4	12	9	14	13	10	14	55	62	117	5.9	6.6	6.2	
29	Rayapettah	9	4	5	4	7	5	2	3	6	5	6	5	39	22	61	3.6	2.1	2.9	
30	Mylapore	1	6	5	4	6	3	5	6	6	9	7	5	34	29	63	3.6	3.4	3.5	
Total		301	320	272	292	330	238	203	309	321	296	501	327	1,850	1,660	3,510	6.7	6.6	6.7	
																			7.2	

Annual Form No. XVI.—Deaths registered from ‘Injuries’ by divisions during each month of the year 1921.

1	2	3	4												5	6			
			5																
			6																
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of Population.	Mean ratio per 1,000 during previous five years.	
														Males.	Females.	Total.			
																			Males.	Females.	Total.
1	Royapuram	1	1	2	2	...	1	2	...	3	...	1	...	9	4	13	0.9	0.4	0.6
2	Pondiarpet	1	4	3	2	4	2	2	...	1	1	1	...	12	12	24	1.4	1.4	1.4
3	Washermanpet	1	...	...	1	...	1	...	...	...	1	...	...	?	1	4	0.3	0.08	0.2
4	Korukupet	...	...	...	...	...	...	...	...	...	1	...	...	2	1	3	0.2	0.1	0.2
5	Harbour	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7	1.0	0.8	0.96
6	Muthialpet	2	1	...	...	1	1	...	...	...	...	...	1	6	...	6	0.6	...	0.4
7	Kachaleeswaranpet	1	...	...	...	...	...	...	...	...	...	...	...	2	1	2	0.3	0.2	0.2
8	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Ammen Koil	...	...	2	...	...	...	...	...	1	...	...	...	3	1	4	0.4	0.1	...
10	Seven Wells	...	...	1	...	...	...	1	...	3	1	...	...	4	2	6	0.4	0.2	0.3
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	0.6	0.3
12	Peddunnaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	0.1	0.1	0.1
13	Trevelyan Basin	3	...	...	...	...	...	...	...	...	...	...	...	2	2	4	0.2	0.2	0.2
14	Esplanade	1	4	5	...	...	1	4	...	4	...	...	...	23	5	28	1.49	4.5	10.5
15	Park Town	1	...	...	...	...	...	...	...	1	...	...	...	3	4	7	0.3	0.5	0.4
16	Perambur	2	3	...	6	1	...	2	...	4	1	...	...	15	7	22	1.0	0.5	0.7
17	Chulai	1	...	2	...	...	1	3	...	1	...	...	...	9	4	13	0.7	0.3	0.5
18	Purasawakam	3	...	...	...	...	...	...	...	...	1	...	...	8	5	13	0.8	0.5	0.6
19	Vepery	...	...	...	...	...	...	...	...	1	1	...	...	4	1	5	0.4	0.1	0.3
20	Egmore	...	...	...	...	...	...	...	...	1	1	...	...	3	3	6	0.2	0.3	0.2
21	Kilpauk	...	...	...	...	...	...	...	...	2	...	...	...	6	...	6	0.6	0.3	0.3
22	Nungambakam	...	...	...	...	...	...	...	...	...	1	...	...	4	3	7	0.4	0.3	0.3
23	Chintadripet	...	...	1	1	...	1	...	...	...	...	...	...	2	2	4	0.2	0.2	0.1
24	Tiruvateswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	2	1	3	0.2	0.03	0.1
25	Chepauk	1	...	...	...	7	1	...	...	...	1	...	...	7	7	14	1.0	1.1	1.1
26	Triplicane	...	...	...	...	...	...	...	...	1	...	...	...	3	2	5	0.3	0.3	0.3
27	Amir Mahal	...	...	3	...	2	1	...	...	1	2	...	...	5	5	10	0.7	0.7	0.7
28	Mirshahpet	...	...	1	...	...	...	...	...	1	...	...	...	4	3	7	0.4	0.3	0.4
29	Rayapettah	2	...	...	...	...	...	...	...	...	...	...	...	6	2	7	0.5	0.2	0.3
30	Mylapore	...	1	...	...	...	3	...	...	...	...	...	...	5	1	6	0.5	0.1	0.3
Total		21	24	24	22	29	13	23	21	25	11	20	8	157	84	241	0.5	0.3	0.5
																			0.4

Annual Form No. XVII,—Deaths registered from ‘Child-Birth’ by divisions during each month of the year 1921.

1	2	3												4		5	6			
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.		Ratio of Deaths per 1000 of Population.		Mean ratio per 1,000 during previous 5 years.		
														Males.	Females.	Total.	Males.		Females.	
																			Total.	Total.	Total.
1	Royapuram	1	1	..	1	1	..	1	5	5	0.5	0.2	Not available.	
2	Tondiarpet	..	..	..	1	..	1	..	..	..	2	..	..	4	4	0.5	0.2
3	Washermanpet	..	..	..	..	1	1	..	..	..	..	..	1	3	3	0.3	0.1
4	Korukupet	..	..	..	1	..	2	..	..	..	..	..	2	1	1	0.1	0.06
5	Harbour	2	1	1	..	..	..	..	..	..	..	..	..	8	8	3.5	1.1
6	Muthialpet	..	1	..	..	1	..	..	..	..	..	1	2	2	2	0.3	0.1
7	Kachaleswaranpet	1	..	..	..	..	..	..	..	..	..	..	2	4	4	0.7	0.3
8	Kothawal Bazaar	..	..	..	..	1	..	1	1	1	..	..	2	4	4	2.0	0.8
9	Annen Koil	1	..	..	..	..	..	1	1	1	..	..	2	6	6	0.8	0.4
10	Seven Wells	3	..	2	1	..	3	2	2	1	1	5	2	21	21	2.1	1.1			
11	Sowcarpet	1	..	1	1	..	..	..	1	1	2	1	1	8	8	2.5	1.1
12	Peddunaickenpet	3	1	2	2	..	2	1	1	1	1	1	1	14	14	1.6	0.8			
13	Trevelyan Basin	..	..	1	..	3	..	1	1	3	1	..	..	11	11	1.3	0.6
14	Esplanade	2	..	..	..	..	1	1	1	..	3	3	2	7	7	6.3	2.6
15	Park Town	..	1	5	1	1	1	2	2	4	2	1	1	12	12	1.5	0.7			
16	Perambur	..	1	1	1	2	2	1	1	1	..	1	1	22	22	1.6	0.8			
17	Chulai	..	..	1	1	1	3	..	1	1	..	..	4	10	10	0.9	0.4
18	Purasawakkam	..	..	..	1	1	1	1	1	..	..	1	2	9	9	0.9	0.4
19	Vepery	..	1	..	..	..	1	2	1	..	..	3	1	5	5	0.5	0.3
20	Egmore	..	..	1	..	1	1	1	..	3	..	..	..	7	7	0.6	0.3
21	Kilpauk	..	..	..	..	..	1	..	..	..	..	1	..	5	5	0.6	0.3
22	Nungambakkam	..	..	1	..	1	2	..	1	..	..	2	1	3	3	0.3	0.2
23	Chintadripet	1	1	..	1	1	1	..	1	..	..	3	1	9	9	0.8	0.4	
24	Tiruvatteswaranpet	1	1	1	1	1	1	..	1	3	..	..	..	6	6	0.5	0.2
25	Chepauk	..	..	1	1	1	2	..	..	2	1	2	..	9	9	1.4	0.7
26	Triplicane	..	..	1	..	1	..	..	..	1	1	1	..	6	6	0.8	0.4
27	Amir Mahal	1	..	1	..	..	1	..	..	2	1	..	1	6	6	0.7	0.4
28	Mirshahibpet	..	..	..	..	1	1	..	..	1	1	..	..	1	1	0.1	0.05
29	Rayapettah	2	2	..	..	..	1	..	..	..	..	..	..	6	6	0.6	0.3
30	Mylapore	..	..	..	..	..	..	..	..	..	..	1	1	2	2	0.2	0.1
Total		19	10	18	11	16	23	12	18	21	15	30	23	216	216	..	0.9	0.4		

Not available.

Annual form No. XVIII.—Deaths registered from “Other causes” by divisions during each month of the year 1921.

1	2	3	4												5		6				
			Districts.	Divisions.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Total.			Ratio of Deaths per 1,000 of Population.
																		Males.	Females.	Total.	
1	Rayapuram	48	53	33	30	23	24	30	34	28	33	28	25	192	197	389	18.5	18.8	18.6		
2	Tondiarpet	69	59	43	44	47	47	44	64	38	53	38	46	333	259	592	39.0	31.0	35.0		
3	Washermenpet	58	34	62	35	18	22	29	30	42	20	26	49	227	198	425	18.9	16.8	17.9		
4	Korukpet	38	32	22	17	27	21	17	22	16	21	32	29	154	140	294	17.8	17.6	17.7		
5	Harbour	18	15	12	10	13	16	11	10	9	6	6	16	82	60	142	16.3	26.6	21.5		
6	Muthialpet	18	24	14	12	8	9	6	16	18	16	28	16	92	93	185	9.5	15.6	12.6		
7	Kachalsewaranpet	19	28	18	20	13	15	12	16	13	18	12	15	98	101	199	13.8	17.0	15.4		
8	Kothawal Eazaar	7	12	8	5	5	6	9	7	2	10	3	4	49	29	78	15.7	14.5	15.1		
9	Ammen Kail	38	52	32	27	32	24	14	20	21	39	20	32	166	185	351	20.5	23.9	22.2		
10	Seven Wells	36	43	29	26	33	12	18	33	23	29	33	29	158	186	344	16.2	18.8	17.5		
11	Sowcarpet	10	17	8	5	10	8	4	9	13	9	17	8	54	64	118	12.6	20.1	16.4		
12	Peddunackanpet	43	29	26	16	25	25	19	22	24	26	23	24	156	146	302	17.4	16.9	17.2		
13	Trevelyan Basin	31	31	22	14	20	13	22	19	27	25	28	23	144	131	275	16.4	15.4	15.9		
14	Espianade	19	18	13	9	18	17	14	21	18	16	20	17	140	60	200	90.4	53.8	72.1		
15	Park Town	25	28	28	21	14	12	10	13	20	21	31	22	139	106	245	14.5	13.3	13.9		
16	Perambur	38	38	43	19	36	19	23	25	14	24	33	35	172	175	347	11.1	12.5	11.8		
17	Chulai	45	35	33	23	31	18	20	21	19	32	31	33	188	153	341	15.3	13.1	14.2		
18	Purasawakam	28	28	22	19	20	14	20	13	18	22	20	30	132	122	254	12.6	12.0	12.3		
19	Vepery	33	25	27	16	24	11	15	25	10	24	26	29	129	136	265	12.8	14.7	13.7		
20	Emmore	42	33	19	20	35	28	28	42	34	39	23	36	188	191	379	13.6	16.2	14.9		
21	Kilpauk	29	25	21	14	22	13	16	30	16	18	19	19	126	119	245	13.0	13.4	13.2		
22	Nungambakam	29	28	25	18	9	15	16	22	17	23	25	30	129	128	257	11.7	12.6	12.1		
23	Chintadripet	34	31	30	38	36	30	27	26	16	25	30	48	223	178	401	18.2	15.4	16.8		
24	Tiruvatteswaranpet	53	36	34	28	36	19	25	34	33	24	28	47	209	188	397	16.6	16.2	16.4		
25	Chepauk	20	16	19	15	21	14	20	22	20	23	14	22	126	100	226	17.9	16.1	17.0		
26	Triplicane	30	21	17	21	17	14	16	30	26	14	20	19	127	118	245	14.6	15.1	14.8		
27	Anir Mahal	30	33	32	18	29	22	13	22	27	11	21	35	167	126	293	22.0	16.4	19.2		
28	Mirahibpet	25	29	25	23	19	13	17	19	24	20	23	31	151	117	268	16.3	12.5	14.4		
29	Royapetta	37	48	35	21	25	16	20	27	22	19	26	30	192	134	326	17.7	12.8	15.3		
30	Mylapore	30	24	23	21	16	14	15	12	17	21	20	25	117	121	238	12.5	14.3	13.3		
Total		980	925	775	605	682	531	553	706	645	691	704	824	4,560	4,061	8,621	16.5	16.2	16.4		
																			19.1		

Not available.

Annual Form No. XIX :--Comparing the Deaths from some of the principal diseases during the year with the deaths during the preceding five years.

Years.	Cholera.		Small-pox.		Measles.		Plague.		Malaria.		Enteric Fever.		Other Fevers.		Dysentery and Diarrhoea.		Tuberculosis other than Pulmonary.		Respiratory System.		Injuries.		Death from child birth.		All other causes.		Total Deaths.	
	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.
1916 ...	30	0.06	476	0.9	282	0.5	11	0.02	763	1.5	49	0.09	479	0.9	3,664	7.1	77	0.1	799	1.5	2,851	5.5	145	0.3	8,246	15.9	17,872	34.5
1917 ...	78	0.2	195	0.4	79	0.2	6	0.01	859	1.7	47	0.09	575	1.1	4,131	7.9	91	0.2	976	1.9	3,293	6.4	203	0.4	9,384	18.1	19,917	38.4
1918 ...	503	1.0	272	0.5	104	0.2	22	0.04	881	1.7	45	0.09	4792	9.2	5,533	10.7	57	0.1	1,431	2.8	5,518	10.6	177	0.3	11,927	23.0	31,262	60.3
1919 ...	642	1.2	611	1.2	108	0.2	14	0.03	736	1.2	52	0.1	2522	4.9	5,835	11.3	131	0.3	1,178	2.3	3,839	7.4	209	0.4	11,310	21.8	27,187	52.4
1920 ...	22	0.04	109	0.2	41	0.08	8	0.02	560	1.1	66	0.1	1774	3.4	4,671	9.0	77	0.1	920	1.8	3,431	6.6	296	0.6	9,443	18.2	21,418	41.3
Mean of the last five years	255	0.5	333	0.6	123	0.2	12	0.02	760	1.4	52	0.09	2028	3.8	4,767	9.0	87	0.2	1,061	2.0	3,786	7.2	206	0.4	10,062	19.1	23,531	44.7
1921 ...	139	0.3	180	0.3	40	0.08	3	0.006	652	1.2	85	0.2	1475	2.8	4,149	7.9	52	0.1	905	1.7	3,510	6.7	241	0.5	8,621	16.4	20,268	38.5

Annual Form No. XX showing a complete classification of diseases arranged in the order adopted in the Nomenclature of Diseases.

	No in the Nomenclature of Diseases.	Causes of Death.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Infective Diseases.	4	Beri Beri	...	...	1	...	...	...	...	1	...	...	...	...	...	2
	5	Cerebro-Spinal Meningitis	...	...	1	...	...	4	...	1	2	1	...	...	...	9
	6	Chicken-pox	...	...	...	1	2	...	...	...	...	...	...	...	2	5
	7	Cholera	...	...	15	106	8	...	2	5	1	...	...	...	2	139
	10	Diphtheria	...	...	...	1	...	1	...	...	...	1	...	...	1	4
	11	Dysentery	...	...	249	259	200	151	170	130	200	196	147	106	149	2,064
	13	Enteric Fever	...	...	8	5	13	5	9	7	12	7	4	6	8	85
	14	Enteritis	...	...	234	203	207	142	182	142	277	160	111	118	141	2,085
	15	Erysipelas	...	...	3	1	1	1	3	3	...	...	...	...	...	13
	21	Influenza	...	...	20	19	12	12	13	7	2	6	6	2	6	110
	22	Kala-Azar	...	...	1	2	...	1	4	2	3	5	3	...	2	24
	23	Leprosy	...	...	15	9	7	7	7	6	7	3	4	8	7	87
	25	Malarial Fever	...	...	50	72	57	40	41	24	41	64	63	64	64	614
		" with Enlargement of Spleen	...	...	4	3	1	5	2	1	2	2	1	1	6	31
		" with Congestion of Brain	...	...	...	...	...	...	...	...	...	...	...	...	...	1

77

-Annual Form No. XX—Showing a Complete Classification of diseases arranged in the order adopted in the
Nomenclature of Diseases.—(Continued)

	No in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
General Diseases	50	Alcoholism ... ..	...	1	...	...	...	...	...	...	...	...	..	...	1
	61	Anaemia	22	20	17	8	13	11	7	17	11	14	13	10	163
	63	" Pernicious	2	1	...	1	2	...	...	...	...	5	2	1	14
		" and Dropsy	3	3	2	3	...	1	3	7	4	2	1	6	35
	66	Diabetes	2	2	2	...	7	...	4	3	1	1	1	3	26
		Diabetic Carbuncle ... ..	...	3	...	3	2	3	1	1	...	1	...	1	15
		" Coma	2	1	1	1	2	2	1	2	...	1	...	1	14
		" Gangrene ... ..	...	...	...	...	...	...	1	1	1	...	...	...	3
	72	Myxoedema	1	...	...	...	...	...	...	...	...	...	...	...	1
	76	Rickets	5	3	5	2	3	2	1	8	3	3	...	3	38
	78	Malformation:—B.—Incomplete development affecting the several organs &c.													
		(5) APPARATUS PEPHIGUS.													
		Stenosis of aortic arch ... ..	...	...	...	...	...	...	...	...	1	...	...	...	1

80	Tumour in the Abdomen	...	...	...	1	1	1	1	2	1	1	...	...	11
	Sarcoma	...	...	...	1	...	...	...	...	...	...	...	...	1
	Cancer	...	...	...	3	5	7	2	5	4	4	6	4	56
	Ulcer	...	...	...	1	2	3	1	...	3	4	...	...	19
82	EFFECTS OF PARASITES.													
	<i>Nematoda</i>													
	(59) Ascaris Lumbricoids Linnaeus	...	...	...	...	...	...	1	...	1	...	...	...	2
	(79) Ankulostomum	...	...	...	6	4	1	10	1	4	5	2	5	44
85	Effects of Poisons.—													
	ACID AND ACID SALTS.													
	(4) Nitric Acid	...	...	...	...	...	...	...	1	...	...	...	...	2
	ORGANIC SUBSTANCES.													
	(5) Carbolic Acid	...	...	...	...	...	...	...	...	...	...	...	...	1
	VEGETABLE POISONS.													
	(37) Opium Poison	...	...	...	...	...	...	...	2	...	...	...	...	3
	ANIMAL POISON.													
	(b) Scorpion-sting	...	...	...	...	...	...	...	1	2	1	...	...	5
	Diseases of the Spinal Cord and Membrane.													
	MEMBRANES.													
88	Meningitis	...	...	...	2	1	...	2	1	...	2	1	...	14

Diseases of the Nervous system

Annual Form No. XX—Showing a Complete Classification of diseases arranged in the order adopted in the

Nomenclature of Diseases.—(Continued)

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Nervous System.	90	Myelitis	...	1	...	...	...	...	...	...	...	...	...	...	1
	94	(a) Degeneration of anterior Cornua	...	1	...	...	...	...	...	...	...	...	...	...	1
		Diseases of the Brain and its membranes.													
		BRAIN.													
	101	Cerebral Haemorrhage	...	4	3	5	8	2	2	3	7	5	4	4	59
	109	Apoplexy	...	...	3	2	3	1	..	2	...	...	...	1	15
	110	Paralysis	...	6	10	2	5	3	5	10	4	6	11	11	81
		„ (a) Paraplegia	...	3	2	...	1	...	...	4	3	2	...	3	20
		„ (b) Hemiplegia	...	20	8	23	18	11	11	13	16	13	10	10	175
		„ (c) Monoplegia	...	...	...	...	...	...	...	1	...	...	...	...	1
	123	Eclampsia (Convulsions)	...	109	117	118	154	91	121	133	139	132	107	152	1,525
		„ Puerperal	...	4	4	3	8	3	4	4	5	3	3	3	47
	124	Epilepsy	...	3	2	1	1	2	1	2	2	3	...	2	20
	131	Neuralgia	...	...	...	1	...	...	..	1	...	...	...	...	2

Diseases of the Nervous System (contd.).													
133	Hysteria	...	...	...	...	...	...	...	...	...	1	...	2
143	Neurasthenia	...	...	...	...	...	...	1	...	...	...	...	1
II DISORDERS OF FUNCTION.													
145	Mania	...	...	...	...	...	...	1	...	2	...	...	3
146	Melancholia	...	...	...	...	...	...	...	...	...	...	1	1
147	Circular Insanity	...	...	1	...	...	1	...	...	...	...	...	2
165	Dementia	...	...	...	...	...	...	...	...	...	...	1	1
DISEASES OF THE NOSE.													
280	Epistaxis	...	...	...	1	...	...	...	...	...	...	...	1
DISEASES OF THE HEART.													
286	Pericarditis	...	...	...	1	...	1	...	...	...	...	1	7
DISEASES OF THE ENDOCARDIUM.													
292	Endocarditis	...	...	...	...	...	...	...	...	1	...	...	2
293	Valvular Disease...	...	...	...	10	4	7	3	7	8	4	5	65
	Cardiac Failure	...	...	...	6	5	3	3	3	2	1	2	36
	Cardiac Dropsy	...	...	...	1	3	2	5	4	...	1	4	27
	Diseases of the Heart (not specified)	...	...	...	22	29	23	16	15	21	18	22	244
DISEASES OF THE MYOCARDIUM.													
294	Myocarditis	...	...	...	...	2	...	...	...	...	...	...	7
298	Dilatation of the Heart	...	...	...	1	1	...	...	2	3	...	...	11

Annual Form No. XX--Showing a Complete Classification of diseases arranged in the order adopted in the

Diseases of the Circulatory System.-(contd.)		Nomenclature of Diseases.-(Contd.)												Total.
No. in the Nomenclature of Diseases.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
302	Angina Pectoris	1	2	2	1	1	1	1	5	5	5	4	1	1
304	Congest. of Lung	6	2	2	3	5	2	1	3	5	1	2	1	3
303	Syncope	...	...	...	...	...	...	...	...	...	...	...	...	0
316	Aneurysm of Aorta	...	...	...	...	...	1	...	1	...	...	...	1	2
324	Phlebitis	1	...	1	...	...	...	...	1	...	5	1	...	1
330	Asthma	15	15	10	17	10	10	7	5	9	15	14	10	137
404	Bronchitis (Acute)	12	22	20	18	8	14	6	7	8	7	8	9	139
410	Bronchitis (Chronic)	5	17	10	13	18	10	19	11	11	4	11	17	146
412	Bronchitis (a) catarrhal	...	1	...	...	...	...	...	...	...	...	...	...	1
410	Congestion of Lung	1	...	...	...	...	...	...	1	2	...	...	...	4
413	Broncho-Pneumonia	147	136	128	157	196	127	113	183	171	152	150	161	1,821

422	Atelectasis	...	...	...	2	9	4	3	5	4	8	3	6	2	5	8	59
423	Collapse of the Lung	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
DISEASES OF THE PLEURA.																	
425	Pleurisy	...	...	...	2	4	3	...	...	...	1	1	...	...	3	3	17
426	Empyema	...	...	...	...	1	...	...	1	...	...	3	1	1	...	...	7
DISEASES OF THE MOUTH.																	
438	Cancerumoris	...	...	...	2	...	1	1	3	...	...	4	...	2	2	2	17
DISEASES OF THE TEETH, ALVEOLI AND GUMS.																	
440	Disorders of Dentition	...	...	...	2	...	2	...	...	...	...	1	1	...	1	...	7
<i>Diseases of the Stomach.</i>																	
489	Gastritis Acute	...	...	...	4	2	1	2	2	3	2	1	2	3	3	2	27
	" Chronic	...	...	...	1	4	1	...	...	3	...	3	4	...	2	3	21
491	Gangrene	...	...	...	1	...	...	1	1	...	2	...	1	1	...	3	10
492	Haematemesis	...	...	...	...	2	...	...	...	...	...	...	...	...	1	1	4
499	Dyspepsia	...	...	...	4	2	2	4	5	2	4	1	5	5	3	2	39
DISEASES OF THE INTESTINES.																	
515	Inflammation.—	...	...	...	1	...	1	1	...	...	...	1	2	...	...	...	8
	" (2) Appendicitis	...	...	...	...	...	1	1	...	...	...	...	...	...	...	2	...
	" Gastro-Enteritis	...	...	...	...	...	1	1	1	1	1	4	...	...	...	2	11
	" (3) Colitis	...	...	...	2	3	...	...	1	...	...	2	2	1	4	1	16

Annual Form No. XX.—showing a complete classification of diseases arranged in the order adopted in the Nomenclature of Diseases. —(Contd.)

	No. in the Nomenclature of Diseases.	Causes of Deaths.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Digestive System.—contd.	526	Sprue ...	...	2	...	...	...	...	...	...	1	...	2	...	5
	528	Hernia ...	...	1	1	...	1	1	1	...	1	...	...	...	6
		„ Strangulated. ...	2	1	2	5	3	2	2	4	2	1	2	3	29
	536	Obstruction of Bowels ...	15	12	13	13	12	10	11	6	9	13	9	12	135
	539	Intestinal catarrh ...	1	...	...	1	...	...	...	...	1	1	...	...	4
	544	Colic... ...	2	...	2	...	2	...	...	...	...	...	...	2	8
		DISEASES OF THE RECTUM AND ANUS.													
	549	Fistula of Anus ...	...	...	...	...	1	...	2	...	...	...	...	...	3
	556	Piles ...	...	5	5	...	4	3	1	2	...	2	1	1	24
		DISEASES OF THE LIVER.													
	568	Hepatitis ...	9	2	3	2	2	1	...	3	6	5	4	4	41
		„ (a) Traumatic Abscess ...	2	...	...	1	3	1	1	4	1	...	2	5	20
		„ (b) Cirrhosis of Liver ...	4	12	4	9	3	3	8	6	7	2	7	8	73
	569	Enlargement of Liver ...	8	4	2	1	...	...	1	3	3	2	3	1	28

Diseases of the Digestive System.—(contd.)

570	Acute Yellow Atrophy	...	...	...	...	...	...	1	...	1	...	...	...	...	1	3
571	Congestion of Liver	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
573	Atrophy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
575	Jaundice	...	...	...	2	6	1	...	3	...	3	2	2	2	1	25

DISEASES OF THE PERITONIUM.

588	Peritonitis	...	...	...	5	4	5	3	1	1	...	7	...	4	2	...	32
590	Ascites	...	...	...	17	25	7	4	6	3	8	4	3	7	6	6	96

DISEASES OF THE SPLEEN

592	Enlargement of the Spleen	3	2	2	...	3	1	...	2	...	13
-----	---------------------------	-----	-----	-----	---	---	-----	-----	-----	---	-----	---	---	-----	---	-----	----

DISEASES OF THE LYMPHATIC GLANDS.

605	Bubo	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
615	Filariasis	...	...	...	...	...	...	...	1	...	...	1	1	...	...	...	3

DISEASES OF THE LYMPHATIC VESSELS.

616	Lymphangitis	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
618	Elephantiasis of the Scrotum	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
	Elephantiasis of the Leg	...	...	...	...	...	...	1	!	...	...	...	...	...	...	...	2

Diseases of the Lymphatic System.

Annual Form No. XX showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases:—(Contd.).

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Thyroid Glands.	633	Suppuration	...	1	1	...	1	...	...	...	1	...	...	1	5
	651	Nephritis Acute...	...	9	9	5	2	4	3	7	8	8	8	6	77
		Renal Dropsy	...	6	9	3	3	2	4	7	8	8	11	17	92
	652	Bright's Disease	...	9	9	5	9	4	2	3	1	2	2	5	62
		Sub-divisions—(1) Chronic Nephritis	...	5	2	4	...	...	...	1	1	2	1	2	21
		Abcess:—													
	654	(d) Pyonephrosis	...	...	...	1	...	...	...	...	...	...	...	...	1
	671	General Stenosis	...	...	...	...	...	1	...	1	...	...	...	...	2
Diseases of the Urinary System.															
DISEASES OF THE URETHRA.															

Annual Form No XX showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases:—(Contd.)

Diseases of the Generative System.—contd.	No. in the Nomenclature of Diseases.	Causes of Death.	the Nomenclature of Diseases:—(Contd.)												Total.
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Diseases of the Generative System.—contd.	754	Diseases of the Tunica Vaginalis.	...	1	...	...	...	...	...	...	...	...	1	...	2
		Hydrocele	...	...	...	...	...	...	1	...	...	...	1	...	2
	757	Diseases of the Testicle.	...	...	...	...	...	...	...	...	...	...	...	...	2
		Inflammation—(1) Orchitis	...	...	...	...	...	...	...	...	...	...	...	1	2
	785	DISEASES OF THE FEMALE ORGANS OF GENERATION.	...	...	...	...	...	...	1	...	...	...	...	1	2
		Diseases of the Uterus including the Cervix.	...	...	...	...	...	...	...	...	...	1	...	...	2
Diseases of the Generative System.—contd.	791	(a) Fibromyoma	...	...	...	...	...	...	...	...	...	...	...	1	7
	797	Rupture of Uterus	...	...	...	1	1	...	...	2	1	...	1	1	7

Affections connected with Pregnancy.																
834	Abortion	...	...	...	1	...	3	...	1	3	...	4	...	...	1	13
Affections connected with Parturition.																
842	Hæmorrhage	...	...	...	...	...	...	1	...	...	...	...	...	...	1	2
850	Asphyxia of child	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
852	Premature Birth	...	...	...	129	85	82	75	50	49	72	80	68	87	86	961
	Difficult Labour...	...	...	...	1	3	1	...	...	1	1	4	1	2	1	15
Affections consequent on Parturition.																
853	Post-partum Hæmorrhage	...	...	...	4	2	1	...	...	1	...	1	1	...	4	14
855	Puerperal causes.—															
	” Sapræmia	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
861	Pelvic Abscess	...	...	...	...	...	...	...	...	...	...	...	1	1	...	2
	Sudden death after delivery.															
870	(9) From Shock after Delivery	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2
Diseases of the Bones exclusive of the Spine.																
885	Inflammation.—															
	(b) Periostitis	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Diseases of the Spine.																
916	Caries	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1

Annual Form No. XX showing a complete classification of Diseases arranged in the order adopted in the Nomenclature of Diseases.—(Contd.).

	No. in the Nomenclature of Diseases.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
General Injuries.		Diseases of the Connective Tissue.													
	952	Cellulitis	...	1	1	...	2	1	1	...	3	...	...	1	10
	953	Abscess	...	13	7	4	8	15	6	6	4	7	7	4	92
		Diseases of the Skin.													
	962	Eczema	...	...	...	1	1	...	...	...	...	...	...	...	2
	965	Boil ...	...	...	2	2	1	1	...	...	...	...	...	1	7
	966	Carbuncle	...	3	2	...	5	3	2	2	1	2	2	1	23
		General Injuries.													
	1025	Effects of Heat (a) Burns and scalds	...	...	...	...	1	...	1	...	1	...	...	1	5
		(c) Sun-stroke	...	...	...	...	3	3	...	...	...	...	...	...	6
	1029	Effects of Electricity	...	...	...	...	...	...	...	...	1	...	...	...	1

General Injuries.																	Local Injuries.																
1030	Suffocation	...	...	...	4	7	6	7	6	2	5	2	6	6	5	5	61													
	"	by Drowning	Accident	...	4	6	6	9	9	10	7	7	5	4	5	11	88																
	"	"	"	Suicidal	...	...	...	2	6	1	...	1	1	...	...	...	11										
	"	by Hanging	Suicidal	...	...	2	...	2	...	...	..	...	1	...	2	1	8										
	"	by Judicial	Hanging	...	...	...	1	...	1	...	...	...	...	...	...	...	2						
1031	Starvation	...	...	...	10	11	4	5	3	6	5	6	6	9	3	6	74													
1033	Shock	...	...	...	1	...	1	...	3	1	...	1	...	...	1	2	10											
	"	Due to carriage	accident	...	...	...	...	...	...	...	...	1	...	...	...	...	1				
	"	"	Train	...	1	...	...	1	...	...	...	...	...	...	...	...	2						
	"	"	Motor	...	...	1	2	2	1	1	1	...	1	...	...	...	9											
	"	"	Tram	...	...	...	1	...	...	...	...	...	...	...	...	...	1				
	"	after operation	...	...	...	...	1	3	2	4	1	...	...	...	1	...	12									
LOCAL INJURIES.																																	
Injuries of the Head.																																	
1092	Fracture of the Skull	...	...	...	2	2	5	...	4	...	3	1	1	1	4	...	23													
1101	Gun-shot wound	...	...	...	2	...	1	...	...	...	2	7	...	1	1	...	14										

Local Injuries.

General Injuries.

Annual Form No XX Showing a complete Classification of Diseases arranged in the order adopted in the
Nomenclature of Diseases.—Contd.

	No. in the Nomenclature of Diseases	Causes of Deaths.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Local Injuries.	1133	Injuries of the Neck (Exclusive of the Vertebral column.)	...	1	...	...	...	1	...	1	...	...	...	...	3
	1135	Fracture of Larynx	...	1	...	2	...	...	...	1	1	1	...	...	6
		Wound of Neck	...	1	...	...	...	...	...	1	...	...	...	...	3
		Injuries of the Chest.													
	1145	Fracture of Ribs	...	1	...	...	...	...	...	1	...	...	1	...	3
	1156	Multiple Injuries	...	2	6	2	4	1	3	2	5	1	2	3	34
		Injuries of the Back (Including the whole Vertebral column.)													
	1160	Fracture of Spine	...	...	...	...	...	...	...	...	1	...	1	...	2
		Injuries of the Lower extremities.													
	1227	Fracture of Femur	...	1	...	...	...	...	...	...	...	...	...	...	1
		Ill-defined and non-Specified Causes.													
		Debility	...	94	81	59	63	68	40	58	64	62	69	79	832
		Old age	...	304	252	149	164	111	132	167	165	196	226	234	2,382
		Natural Causes	...	3	1	...	1	5	1	5	4	3	8	...	34

TABLE A.

Comparative Statement of deaths from some of the principal diseases during the past 12 years.

Years.	Births.		Deaths.		Small-pox.		Malaria.		Other Fevers.		Other Infectious Diseases.		Plague.		Diarrhoea. and Dysentery.		Respira- tory Diseases.		Infantile Mortality under 1 year.		Deaths of children between 1 to 5 years.		Still- Births.
	No. of Births registered exclusive of Still-births.	Birth-rate.	No. of Deaths registered exclusive of Still-births.	Death-rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	
1910	19,340	37.9	20,312	39.8	116	0.2	2,376	4.6	2,742	5.4	1,066	2.1	5	0.009	3,635	7.1	2,173	4.3	5,687	294.1	3,059	67.5	673
1911	19,735	38.3	21,771	42.0	480	0.9	2,884	5.6	1,163	2.2	1,482	2.9	3	0.005	4,854	9.4	3,011	5.8	6,027	305.4	3,233	73.7	665
1912	20,099	38.8	20,132	38.8	106	0.2	2,934	5.7	999	1.9	927	1.8	1	0.002	4,897	9.4	2,671	5.2	5,628	280.4	2,951	67.2	674
1913	19,470	37.5	20,675	39.9	34	0.06	2,788	5.4	1,043	2.0	1,232	2.4	3	0.005	5,193	10.0	2,700	5.2	5,713	293.4	3,296	75.1	642
1914	18,241	35.5	24,174	46.6	66	0.1	2,658	5.1	786	1.5	2,306	4.4	2	0.004	5,598	10.6	3,762	7.3	5,635	308.9	3,740	85.2	606
1915	18,331	35.3	18,688	36.0	92	0.2	1,686	3.3	644	1.2	555	1.1	...	...	4,208	8.1	3,062	5.9	5,244	286.1	2,748	62.6	650
1916	21,675	41.8	17,872	34.5	476	0.9	763	1.5	528	1.0	443	0.9	11	0.02	3,664	7.1	3,727	7.2	5,746	265.1	2,742	62.5	975
1917	23,296	44.9	19,917	38.4	195	0.4	859	1.7	575	1.1	654	1.3	6	0.01	4,131	7.9	4,360	8.4	6,460	277.3	2,945	67.1	1,077
1918	19,897	38.4	31,262	60.3	272	0.5	881	1.7	4,837	9.3	542	1.0	22	0.04	5,533	10.7	7,006	13.5	7,068	355.2	4,914	112.0	834
1919	18,936	36.5	27,187	52.4	611	1.2	736	1.2	2,574	5.0	1,288	2.5	14	0.03	5,835	11.3	5,148	9.9	6,230	329.0	4,595	104.7	837
1920	21,396	41.3	21,418	41.3	109	0.2	560	1.1	1,780	3.4	1,995	3.8	8	0.02	4,671	9.0	4,428	8.5	5,976	279.3	3,654	83.3	1,172
1921	19,187	36.4	20,268	38.5	180	0.3	652	1.2	1,475	2.8	708	1.3	3	0.006	4,149	7.9	4,467	8.5	5,408	281.9	3,273	79.9	1,136

TABLE B.

Rainfall.

Years.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.
	January to March.		April to June.		July to September.		October to December.		
		Inches.		Inches.		Inches.		Inches.	
1916	...	0.04		4.27		8.78		33.38	46.47
1917	...	0.44		6.15		15.90		28.57	51.06
1918	...	10.25		7.60		6.96		50.19	75.00
1919	...	2.33		2.52		16.06		29.87	50.78
1920	...	5.66		1.92		4.75		51.56	63.89
1921	...	5.46		2.64		18.18		28.15	54.43

TABLE C.

Table of Births, Deaths and Infantile Death-rates for the different races
in the City for 1920 and 1921.

Race or Caste.		Population according to Census 1921.	1920.						1921.					
			Total No. of Births.	Birth-rates.	Total No. of Deaths.	Death-rates.	Infantile Deaths.	Infantile Death-rate.	Total No. of Births.	Birth-rates.	Total No. of Deaths.	Death-rates.	Infantile Deaths.	Infantile Death-rates.
Europeans	...	2,938	86	20.5	51	12.2	10	1	79	26.9	57	19.4	6	75.9
Anglo-Indians	...	9,002	385	37.3	312	30.2	57	148.1	378	42.0	337	37.4	84	249.3
Indian-Christians	...	32,196	985	36.1	963	35.2	140	142.1	908	28.2	895	27.8	215	236.8
Hindus	...	4,27,722	17,420	41.9	17,412	41.9	5409	310.5	15,676	36.6	16,422	38.4	4,498	240.2
Mahomedans	...	53,163	2,518	42.6	2,669	45.1	360	143.0	2,144	40.3	2,549	47.9	605	292.1
Others	...	1,890	2	1.1	11	6.2	...	...	2	1.1	8	4.2	...	...
Total	...	5,26,911	21,396	41.3	21,413	41.3	5976	279.3	19,187	36.4	20,268	38.5	5,408	281.9

TABLE D.

Total of Birth and Death rates of Principal Sub-divisions of the Hindu Community for 1920 and 1921.

	Population.	1920.				1921.			
		Total Births.	Birth rates.	Total Deaths.	Death rates.	Total Births.	Birth rates.	Total Deaths.	Death rates.
Brahmins ...	47,969	1,039	31.7	1,063	32.5	1,244	25.9	1,058	22.1
Chetty ...	4,018	1,050	28.8	1,034	28.4	1,190	296.2	1,187	295.4
Vallalah or Mudaliar ...	69,617	2,454	36.9	2,865	35.5	2,320	33.3	2,492	35.8
Balijah or Naidu ...	49,835	1,519	33.9	1,696	35.5	1,482	29.7	1,699	34.1
Vanniah or Naicker	50,058	2,508	50.0	2,202	43.9	2,193	43.8	2,332	46.6
Adi-Dravida ...	58,568	2,803	47.0	2,497	41.9	2,408	41.1	2,417	41.3
Patnavar ...	10,456	517	52.8	525	53.6	354	33.8	486	46.5
Yadaval or Idayar ...	15,269	623	43.5	557	38.9	456	29.8	539	35.3
Viswa Brahmin or Kammalar }	13,806	648	41.5	588	38.3	555	40.2	557	40.3

TABLE E.

Table of Births, Deaths and Infantile Death-rates by months for 1920 and 1921.

Months.	1920						1921					
	Total No. of Births.	Birth-rates.	Total No. of Deaths.	Death-rates.	Infantile Death.	Infantile Death rates on 1000 Live Births.	Total No. of Births.	Birth-rates.	Total No. of Deaths.	Death-rates.	Infantile Death.	Infantile Death rates on 1000 Live Births.
January ...	1,709	39.5	2,254	52.1	570	333.5	1,572	35.8	2,119	48.2	577	367.1
February ...	1,403	32.5	1,863	43.1	491	350.0	1,322	30.1	2,235	50.9	480	363.1
March ...	1,586	36.7	1,928	44.6	437	275.5	1,569	35.7	1,830	41.6	420	267.7
April ...	1,538	35.6	1,629	37.7	369	239.9	1,531	34.8	1,475	33.5	370	240.1
May ...	1,711	39.6	1,616	37.4	454	265.3	1,599	36.4	1,700	38.7	432	271.4
June ...	1,715	39.7	1,518	35.1	419	244.3	1,503	34.2	1,270	28.9	393	231.5
July ...	1,953	45.2	1,471	34.0	433	221.2	1,622	36.9	1,312	29.8	409	252.0
August ...	2,028	46.9	1,514	35.0	465	229.3	1,615	36.7	1,314	41.3	559	346.1
September ...	2,063	47.7	1,511	34.9	457	221.5	1,661	37.8	1,658	37.7	439	264.3
October ...	2,027	46.9	1,662	38.4	517	255.1	1,765	40.1	1,525	34.7	408	231.2
November ...	1,912	44.2	2,066	47.8	686	358.8	1,762	40.1	1,529	34.8	403	228.7
December ...	1,751	40.5	2,386	55.2	679	387.7	1,666	37.9	1,801	41.0	516	310.8
Total ...	21,396	41.3	21,418	41.3	5,976	279.3	19,187	36.4	20,268	38.5	5,408	281.9

TABLE F.

Ratio of deaths among Children under one year per 1,000 live births registered in each Division for 1920 and 1921.

Municipal Divisions.				Ratio of Deaths 1920.	Ratio of Deaths 1921.
1	...	...	...	328.5	310.7
2	...	...	...	277.7	285.5
3	...	....	....	277.7	286.2
4	....	...	.	260.4	331.8
5	...	....	...	414.4	456.9
6	....	...	....	312.5	348.8
7	...	...	.	314.6	390.2
8	....	...	...	405.8	476.2
9	...	...	....	327.1	337.2
10	...	...	....	349.6	336.1
11	....	...	....	508.4	522.6
12	....	...	...	333.9	319.6
13	...	...	...	363.5	377.1
14	...	...	...	500 0	339.8
15	....	....	...	333.9	296.9
16	...	....	...	211.7	220.3
17	...	...	....	262.3	239.0
18	...	...	...	248.6	260.1
19	...	...	...	233.0	269.5
20	...	...	...	233.5	229.0
21	...	...	....	260.9	239.6
22	...	...	...	234.3	256.4
23	...	...	...	278.5	267.0
24	...	...	...	249.6	249 0
25	...	...	...	272.7	206.6
26	...	...	...	232.3	230.8
27	...	....	...	260.0	264.8
28	...	...	...	280.7	296 3
29	...	...	.	240.1	251.5
30	...	...	....	293.8	254.4
Total ...				279.3	281.9

TABLE G.

Table of Infantile Mortality by months in the year 1921.

Months.	Small-pox.	Measles.	Malaria.	Other Fever.	Diarrhoea and Dysentery.	Premature Birth.	Debility.	Nervous System.	Respiratory System.	All other causes.	Total.			Total of all causes for 1920
											Males.	Females.	Total.	
January ...	1	1	1	7	123	129	59	110	93	53	313	264	577	570
February ...	2	...	1	16	112	85	40	72	100	52	284	196	480	491
March ...	3	3	1	12	100	82	37	78	86	18	221	199	420	437
April ...	2	...	...	9	73	75	22	79	84	26	208	162	370	369
May ...	1	...	1	12	110	50	28	96	110	26	240	194	434	454
June ...	3	...	1	13	88	49	37	68	97	35	218	175	393	419
July ...	...	...	3	17	100	72	19	75	86	37	226	183	409	432
August ...	2	...	...	19	181	80	34	36	123	34	297	262	559	465
September ...	3	1	...	12	90	68	37	106	94	28	252	187	439	457
October ...	2	...	1	10	51	87	42	92	78	45	228	180	408	517
November ...	1	2	...	3	58	86	37	76	101	39	222	181	403	686
December ...	11	3	1	4	89	93	40	120	103	47	274	242	516	679
Total ...	33	10	10	134	1,175	961	432	1,058	1,155	440	2,983	2,425	5,408	5,976

TABLE H.

Table of Percentages of Infant Deaths from Principal causes in the year 1921.

Age periods.	Small-pox.		Measles.		Malaria.		Other Fever.		Diarrhoea and Dysentery.		Premature Births.		Debility.		Nervous System.		Respiratory System.		All other Causes.		Total.	
	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.
Under 7 days.	1	0·07	...	...	...	...	5	0·37	34	2·49	792	58·02	171	12·53	190	13·92	72	5·27	100	7·33	1365	25·24
7 days and under 1 month	..	...	..	...	...	...	10	1·23	100	12·30	149	18·33	113	13·90	282	34·62	69	8·49	90	11·07	813	15·03
1 month & under 4 months.	5	0·52	1	0·10	2	0·21	25	2·58	218	22·50	17	1·75	79	8·15	287	29·62	247	25·49	88	9·08	969	17·92
4 months & under 7 months.	11	1·35	5	0·61	4	0·49	32	3·92	269	32·97	2	0·25	24	2·94	145	17·77	276	33·82	48	5·88	816	15·09
7 months & under 10 months.	7	0·89	2	0·25	1	0·13	40	5·08	314	39·85	1	0·13	33	4·19	80	10·15	265	33·63	45	5·71	788	14·57
10 months & under 1 year ...	9	1·37	2	0·30	3	0·46	22	3·35	240	36·53	...	...	12	1·83	74	11·26	226	34·40	69	10·50	657	12·15
Total.	33	0·61	10	0·18	10	0·18	134	2·48	1175	21·73	961	17·77	432	7·99	1058	19·56	1155	21·36	440	8·14	5408	281·9

Statement No. I showing the number of births (Divisional and Hospital) verified during the calendar year 1921 and the number of vaccination of infants under one year of age.

Municipal Division No.	Total births excluding still births.		Still-births.		Deaths under one year.		Number of infants surviving.		Number of infants vaccinated under one year.		Percentage of vaccination to births registered.	
	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.
1	2	3	4	5	6	7	8	9	10	11	12	13
1	553	286	24	11	53	19	460	267	323	164	58.4	57.3
2	620	314	29	36	126	26	494	288	308	139	49.7	44.3
3	865	222	27	28	164	22	701	200	349	46	40.3	20.7
4	611	148	14	12	135	19	476	129	266	39	43.5	26.3
5	188	67	6	2	56	6	132	61	41	23	21.8	34.3
6	271	50	7	6	66	5	205	45	66	8	24.3	16.0
7	283	135	6	10	69	15	214	120	118	16	41.7	11.8
8	100	37	3	6	36	9	64	28	42	10	42.0	27.0
9	502	188	16	14	138	23	364	165	120	39	23.9	20.7
10	498	173	22	17	136	26	362	147	204	58	40.9	33.5
11	156	17	8	3	63	5	93	12	53	...	34.0	...
12	566	88	19	9	137	10	429	78	295	27	52.1	30.7
13	482	91	16	10	116	13	366	78	248	28	51.4	30.8
14	69	22	1	1	15	5	54	17	26	3	37.7	13.6
15	433	83	19	7	95	10	338	73	206	21	47.6	25.3
16	994	152	107	1	112	41	882	111	663	61	56.7	40.1
17	973	121	45	16	200	32	773	89	654	47	67.2	38.8
18	691	139	42	5	101	28	590	111	460	50	66.6	36.0
19	549	315	12	19	96	54	453	261	393	174	71.6	55.2
20	563	581	16	74	100	68	463	513	326	167	57.9	28.7
21	483	145	16	15	82	14	401	131	252	30	52.2	20.7
22	427	244	19	12	79	14	343	230	155	41	36.3	16.8
23	798	355	25	33	136	50	662	305	465	133	58.3	37.5
24	936	190	50	16	98	23	833	167	527	98	56.3	51.6
25	479	137	19	19	79	24	400	113	277	37	57.3	27.0
26	555	84	15	13	92	13	463	71	284	18	51.2	21.4
27	628	129	27	13	147	39	481	90	256	27	40.8	20.9
28	801	106	48	11	100	30	701	76	595	50	74.0	47.2
29	585	209	29	14	109	27	476	182	356	141	60.8	67.5
30	593	60	37	7	90	10	503	50	421	28	71.0	46.7
	16,212	4,888	714	445	3,066	680	13,186	4,208	8,749	1,723	53.8	35.2

Vaccination Statement No. II. showing the number of Births verified in 1921 and the number of Infants vaccinated under one year of age.

Year.	Total number of births excluding still-births.	Number of children in column 2 who died before attaining the age of one year without being vaccinated.	Number of children in column 2 who left the city before attaining the age of one year without being vaccinated.	Number of children in column 2 who were available for vaccination. (column 2 minus 3 and 4).	Number of children in column 5 who were vaccinated before they attained the age of one year.	Percentage of column 6 to column 5.	Number of children in column 5 whose vaccination was postponed beyond one year of age for medical reasons.
1	2	3	4	5	6	7	8
1919	15,016	3 791	2,520	8,705	7,489	86.03	182
1919	4,199	664	845	2,690	1,385	51.84	9
1920	15,536	3,284	3 018	9,234	7,881	85.35	136
1920	4,834	679	948	3,207	1,662	51.82	11
1921	16,252	3 066	3,354	9,832	8,749	89	82
1921	4,888	680	944	3,264	1,723	52.8	4

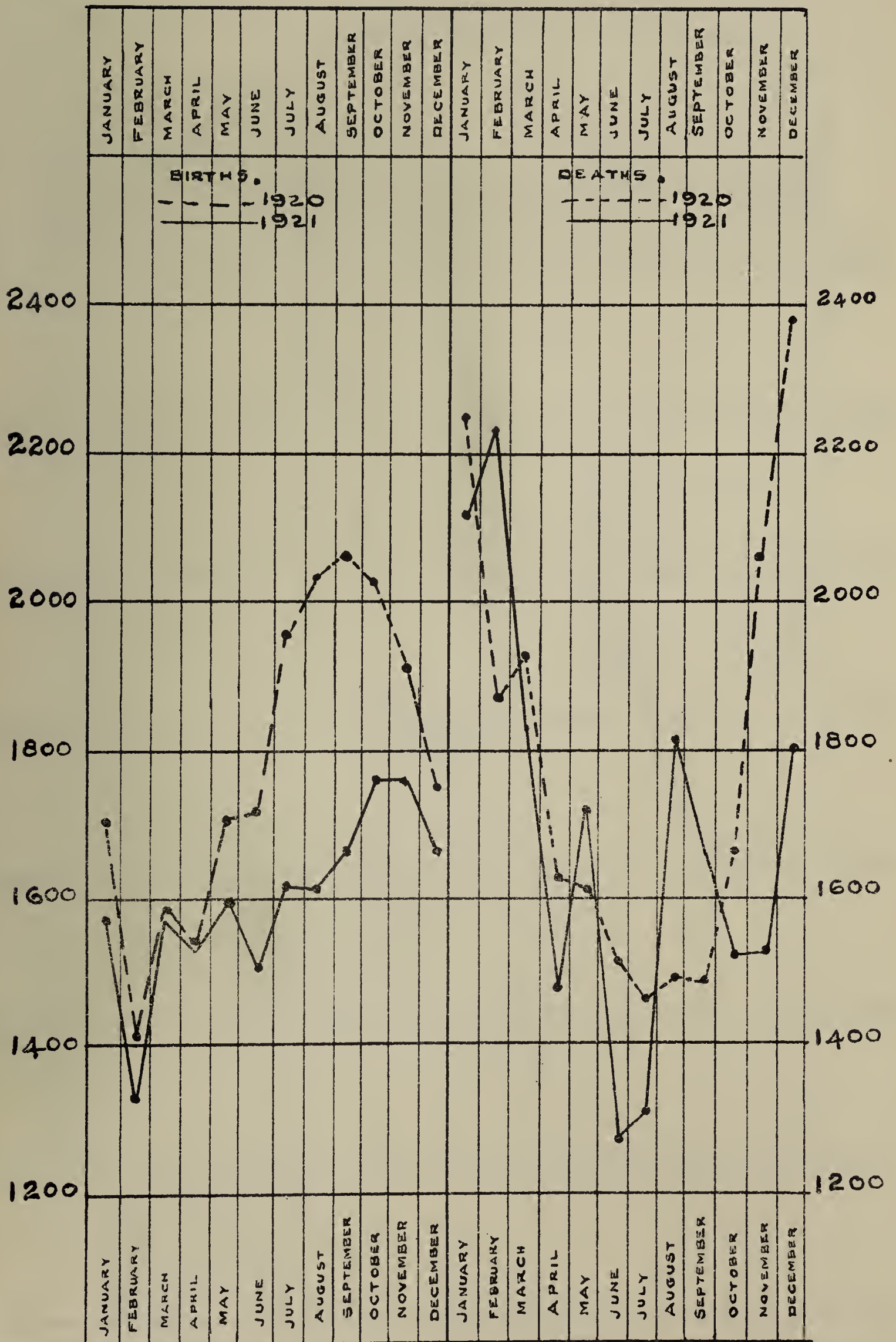
N. B.—The antique figures denote Hospital births,

Vaccination Statement No. III—Showing particulars of Vaccination during the Calendar year 1921.

Divisions.	Districts	Population census 1921.		Number of depots in each division.		Number of Vaccinators in each division.		Total No. of persons vaccinated.		Average No. of persons vaccinated by each Vaccinator.		Primary vaccination.				Re-Vaccination				Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1000 of Population.		Average annual No. of persons successfully Vaccinated during the previous 5 years.		Average annual No. of deaths from small-pox during the previous 5 years.		Average cost of each successful Vaccination.	
		3	2	4	5	6	7	8	9	Successful.				Unknown.		18	19	20	21	22	23	24	25	26	27	28			
										Total.		Under one year.	One year and under six.	Six years and above.	Total.												Unknown.		
										Males.	Females.																		
1	2	3	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
1	Royapuram	20891	...	...	...	523	387	920	...	254	240	494	269	122	2	393	71	426	116	71	92.9	32.7	24.4	...	...	...	...	...	...
2	Tondiarpet	16899	...	...	...	736	659	1,395	...	535	554	1,089	694	117	1	812	212	306	67	79	92.6	29.5	52.0	...	...	...	...	...	...
3	Washermenpet	23777	...	...	...	602	377	979	...	398	317	715	574	100	1	675	...	264	69	129	94.4	51.1	31.3	...	...	...	...	...	...
4	Korukupet	16640	...	...	...	529	254	783	...	256	220	476	363	85	7	455	...	307	59	209	91.4	60.2	30.9	...	...	...	...	...	...
5	Harbour	7288	...	...	...	368	112	480	...	247	112	359	286	30	...	316	28	121	22	39	95.5	26.8	46.4	...	...	...	...	...	...
6	Muthialpet	15631	...	...	...	338	167	505	...	147	109	256	196	44	...	240	9	249	6	48	97.2	3.0	15.7	...	...	...	...	...	...
7	Kacalesvaranpet	13055	...	...	...	326	165	491	...	218	130	348	294	33	...	327	6	143	4	86	95.6	7.0	25.4	...	...	...	...	...	...
8	Kothawal Bazaar	5117	...	...	...	358	361	719	...	198	282	380	282	78	...	360	4	339	3	10	95.7	28.3	88.5	...	...	...	...	...	...
9	Amnen Koil	15820	...	...	...	850	196	1,046	...	221	155	376	288	19	...	307	12	670	22	608	85.8	35.6	20.8	...	...	...	...	...	...
10	Seven Wells	19628	...	...	...	753	193	946	...	167	156	323	268	8	...	276	12	623	32	528	88.7	33.7	15.7	...	...	...	...	...	...
11	Sowcarpet	7460	...	...	...	137	102	239	...	103	84	187	148	37	...	185	1	52	10	3	99.5	20.0	26.1	...	...	...	...	...	...
12	Peddunaickenpet	17575	...	...	...	461	274	735	...	282	258	540	457	53	...	510	10	115	22	44	96.2	14.6	30.3	...	...	...	...	...	...
13	Trevelyan Basin	17272	...	...	...	360	267	627	...	232	214	446	387	40	...	427	6	181	18	57	97.0	14.6	25.8	...	...	...	...	...	...
14	Esplanade	2664	...	...	...	79	102	181	...	47	50	97	77	14	...	91	4	84	2	55	97.8	6.9	34.9	...	...	...	...	...	...
15	Park Town	17544	...	...	...	767	479	1,186	...	296	337	633	532	59	...	591	21	553	50	317	96.6	21.2	36.5	...	...	...	...	...	...
16	Perambur	29459	...	...	...	1,648	330	1,978	...	449	325	774	674	44	...	719	5	1,204	163	227	93.5	16.7	29.9	...	...	...	...	...	...
17	Chulai	24021	...	...	...	611	530	1,221	...	525	495	1,020	883	46	2	931	22	201	57	75	93.3	45.2	41.1	...	...	...	...	...	...
18	Purasaakam	20656	...	...	...	1,048	329	1,387	...	414	404	818	724	26	...	601	7	735	101	159	94.6	17.5	40.0	...	...	...	...	...	...
19	Vepery	19299	...	...	...	514	788	1,302	...	399	340	739	619	24	1	644	12	484	182	24	92.7	39.6	48.1	...	...	...	...	...	...
20	Egmore	25627	...	...	...	1,034	413	1,447	...	235	231	466	378	20	...	398	14	443	45	555	87.9	29.4	26.9	...	...	...	...	...	...
21	Kilpauk	18540	...	...	...	443	466	909	...	312	241	553	415	114	...	529	18	125	26	68	88.1	54.9	32.6	...	...	...	...	...	...
22	Nungambakkam	21222	...	...	...	409	269	678	...	412	388	800	695	34	1	730	15	432	50	266	93.0	30.1	32.8	...	...	...	...	...	...
23	Chintadripet	23790	...	...	...	786	446	1,232	...	324	290	614	489	20	...	509	56	182	12	138	91.2	27.3	21.5	...	...	...	...	...	...
24	Tiruvatteswaranpet.	24195	...	...	...	488	308	796	...	240	271	511	319	72	4	395	72	80	15	31	90.0	30.6	30.9	...	...	...	...	...	...
25	Chepauk	13277	...	...	...	302	289	591	...	228	230	458	361	91	1	437	32	118	13	39	91.8	16.5	24.5	...	...	...	...	...	...
26	Triplicane	16506	...	...	...	312	264	576	...	228	234	462	364	73	...	437	18	50	13	29	98.4	61.9	29.3	...	...	...	...	...	...
27	Amir Mahal	15254	...	...	...	272	240	512	...	329	338	667	567	59	...	626	33	222	164	48	98.7	94.3	42.4	...	...	...	...	...	...
28	Mirsaillipet	18631	...	...	...	440	449	889	...	420	387	807	535	185	...	720	65	191	62	47	97.0	43.1	36.7	...	...	...	...	...	...
29	Royapettah	21315	...	...	...	545	453	998	...	203	206	409	335	34	...	369	31	69	83	21	97.6	17.6	25.3	...	...	...	...	...	...
30	Mylapore	17858	...	...	...	367	210	477	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
-	Total	526911	...	15	48*	1,6336	9,879	26,215	546	8,646	7,813	16,459	12,986	1,703	22	14,711	808	9,756	1,784	4,082	93.9	31.4	24.5	24,645	47.5	333	0.6	...	...

*Includes 31 Asst. Vaccinators and 2 female Vaccinators.

GRAPH SHOWING BIRTHS AND DEATHS BY MONTHS.

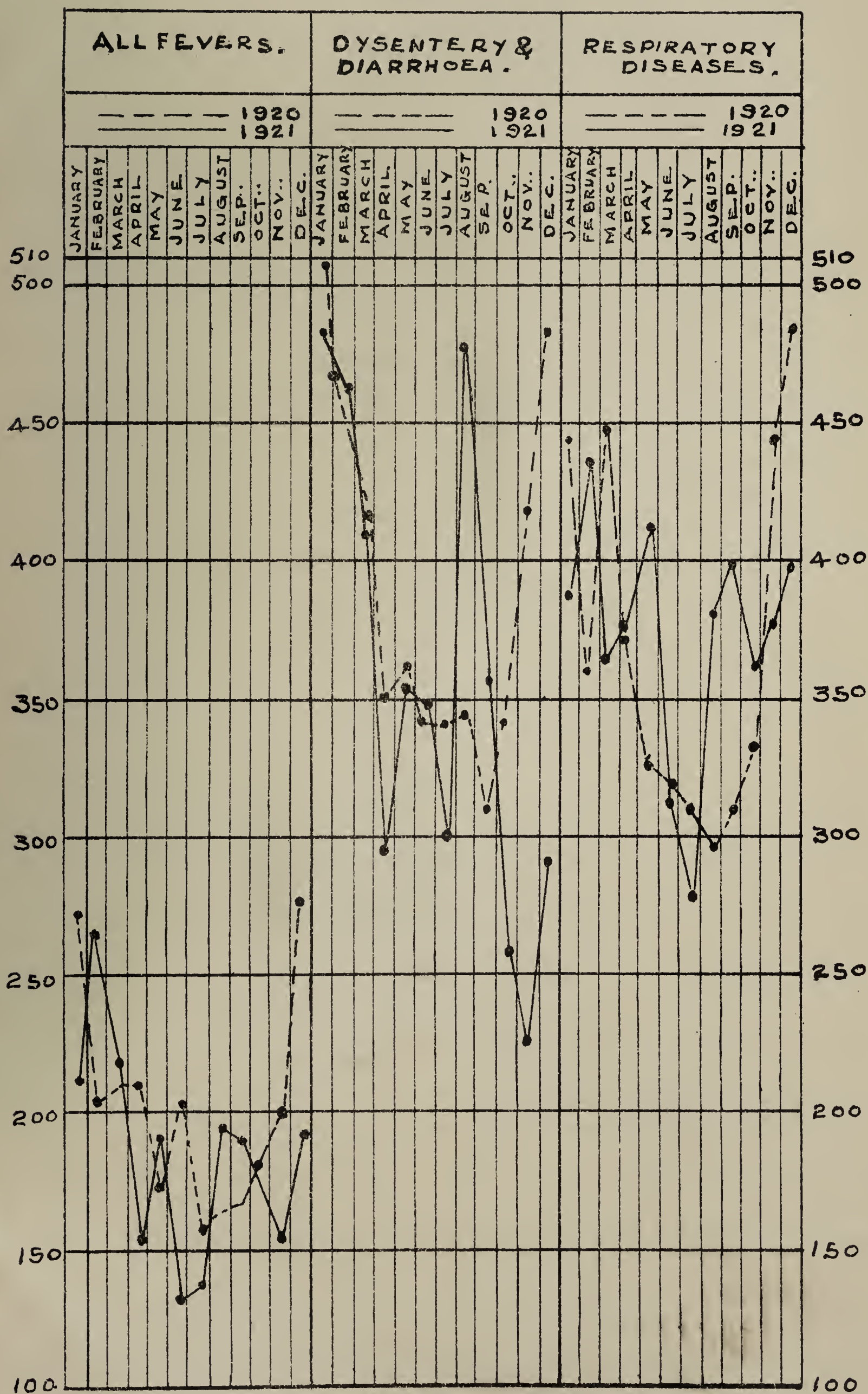


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GRAPH SHOWING THE TOTAL DEATHS BY MONTHS FROM



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BY MONTH

1917



CORPORATION OF MADRAS



(RIPON BUILDINGS)

ANNUAL REPORT

OF THE

[Health Officer]

Healths Department.

of the City of Madras

FOR THE YEAR

1921.

MADRAS :

PRINTED BY S. MURTHY & CO.,

AT THE "KAPALEE PRESS,"

305, THAMBU CHETTY STREET.

1922.